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North Carolina DENTAL JOURNAL

VOLUME 57, NO. 1

JANUARY 1974

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ABOUT THE COVER

Hugh Morton's photograph of a view from Grandfather Mountain depicts North Carolina as *Variety Vacationland*. Here, one looks westward to Mount Mitchell at sunset. Mount Mitchell is the highest in the Eastern American range, and Grandfather Mountain is the highest in the Blue Ridge Mountain range.

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North Carolina DENTAL JOURNAL

VOLUME 57, NO. 1

JANUARY 1974

The NORTH CAROLINA DENTAL JOURNAL is published in January, April, August, and September by the North Carolina Dental Society, 2310 Myron Drive, Raleigh, N. C. 27607. Closing dates are November 1, February 1, June 1, and July 1. Subscription rate \$4 a year; single copies \$1. Second class postage paid at Raleigh, N. C. 27602. The Journal is printed by Edwards & Broughton Company, P. O. Box 27286, Raleigh, N. C.

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Expressions of opinion and statements of supposed fact are the author's and should not be regarded as views of the North Carolina Dental Society.

EDITORIAL

A Funny Thing Happened on the Way to The Dental Forum

In such a state of society (a state of democratic anarchy), the master fears and flatters his scholars, and the scholars despise their masters and tutors; young and old are alike, and the young man is on a level with the old, and is ready to compete with him in word and deed: and old men condescend to the young and are full of pleasantry and gaiety; they are loath to be thought morose and authoritative, and therefore they adopt the manners of the young.

Plato, The Republic, Book VIII

400 B.C.

Webster's International Dictionary has described a forum as "a public meeting place for open discussion." Such was the intended purpose of the North Carolina Dental Forum which was created at the direction of the 1972 House of Delegates.

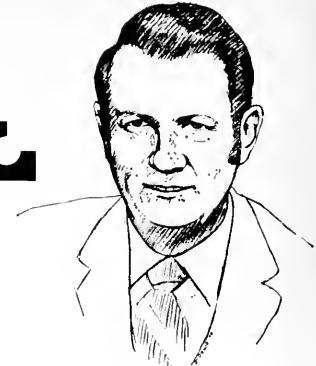
To quote from the first meeting of The Dental Forum: "The Committee moved to adopt the following purpose of the North Carolina Dental Society Interagency Committee (The Dental Forum) for Dentistry:

"1. To improve communications among the leaders of the society, the State Board of Dental Examiners, the Dental Division of the State Board of Health, and the Administration, Faculty, and Students of the School of Dentistry on issues of importance to the profession.

"2. To assist the profession in implementation of programs which work to improve the dental health of the citizens of the State and to advance the interests of the profession.

"This motion was seconded and passed unanimously."

Since the inception of The Dental Forum, membership has been broadened to include representatives of the North Carolina Dental Assistants Association, the North Carolina Dental Hygienists Association, the North Carolina Dental Laboratory Association, representatives from the community colleges and, any other interested dentists and, lay individuals who may wish to attend meetings of The Dental Forum. The Dental Forum is scheduled to meet twice yearly with its prime purpose to be discussion of issues and concerns of dentistry and den-



tists in North Carolina. No policies are communicated outside The Dental Forum unless they are unanimously approved by the attendance of the entire membership at a Forum meeting.

The first item taken from the agenda of the first meeting of The Dental Forum in August of 1972 was Preventive Dentistry. This led to the Law report and subsequently the support and passage of a Preventive Dentistry program for North Carolina which is perhaps the most comprehensive of any state supported program in the nation.

It appeared that great progress was made in North Carolina as a result of the discussions in The Dental Forum which demonstrated unity in the profession in our great state.

The next major item discussed was auxiliaries as they relate to the expanded functions, training, and experimental programs. As this discussion progressed over the next several months communications among members of our Dental Society began to break down.

Since The Dental Forum should increase communication among the many and various sectors and provide an opportunity to discuss our common problems and, differences as they relate to the health care of the citizens of North Carolina, phases of delivery of practice and research at all levels obviously should be considered.

The State Board of Dental Examiners has expressed a feeling that they should no longer participate in The Dental Forum since they are a regulatory agency of the state. In this capacity, they do not feel it appropriate to align themselves with representatives with whom it is possible to have indictment procedures. It is difficult to understand why The Dental Forum is singled out as a discussion group in which they cannot participate when they attend the House of Delegates meeting, The State Dental meeting, District Dental Society meetings, their local society meetings, study clubs and, other professional meetings of organized dentistry.

(Continued on page 20)

GUEST EDITORIAL



Dentistry— A Layman's Viewpoint

A. G. Pete Ivey*

"He filled my mouth up with cotton, and then he started telling me what a great fellow Jesse Helms is."

That was the complaint of a patient who went to her dentist for a couple of fillings.

"He's got the latest equipment—high-speed drills that are so amazingly fast the pain doesn't catch up," said another woman. "Further, his office is bright, colorful and comfortable, and his stereo plays music I like. His work with my teeth is professional and precise—he knows what he's doing—and his attendants are on the spot and sweet."

She added: "Better still, he takes the care and time to tell me everything I need in dental care, and what it's going to cost me, and what can be prevented and what can't. He treats me, not just my teeth."

Both ladies speaking, the complainant and the patient who is pleased, touch on nerves that are sensitive to dentists and to their patients.

In speaking casually to friends over a period of months about what they think of dentists and the quality of care, I have run into the usual responses when a random survey is perpetrated: "You want to know what I think of dentists? You've come to the right person! Now let me tell you!"

Whereupon they start showing their teeth, pointing to a crown, or a bridge, or (sometimes) a snaggle vacancy.

Here's a montage of what they tell: "Since I was a child I've been afraid to go to the dentist, and still am. . . . But gradually over the years I come to the dentists' chair with a new confidence . . . my fears are gone. . . . In fact, nowadays I find that my visit to the dentist is

never as bad as I had expected, painwise. . . . Sure, it's uncomfortable, having all that padding in your mouth, but isn't it wonderful that the drills don't hurt any more? . . . I like my own dentist; he's a nice guy, and an expert—but dentists make a lot of money don't they?" Their charges are more than I can pay out of my month's salary. . . . On the other hand, I can see that the state of my teeth is precarious; I've neglected them, and when the dentist is through with me, maybe I won't go back for a year or two, or longer; so, looking at it that way, his charge is a bargain. . . . That dentist did more than fill my tooth; he examined every spot, upper and lower, and laid out a plan of care that will take weeks and cost me a couple of thousand dollars—if I have it done. . . . Why didn't he just fill the tooth and let me go? . . . On the other hand, I want a dentist who checks me out, diagnoses my complete problem, and then leaves it up to me, whether or not the complete job is to be done. . . . I don't object to big cars driven by dentists who live in big houses, for those dentists pay more for their education and their equipment than members of any other profession — further, I want a successful man to be my successful dentist!

When people criticize and praise a dentist, the pros and cons form something of a debate. But when you ask your crackerbarrel opinion of a lawyer, or a physician, or a newspaperman, or a TV repairman, bankers, or an airplane pilot, you'll invite varied and conflicting responses.

Lawyers are able and competent, as well as shysters and incompetent—depending upon who you ask informally. Doctors are dedicated guardians of health, or quacks—depending upon the experiences and prejudices of the populace as they encounter and observe doctors.

Members of the press are reckless scandal mongers who never get things right, or they are honorable and

(Continued on page 25)

*About the Author) A. G. Pete Ivey, Director of the University News Bureau at Chapel Hill the past 18 years, was a Harvard University Nieman Fellow in Journalism. He is a journalism product of the University of North Carolina in Chapel Hill. He has won awards for editorial writing and for distinguished science writing and interpretation. Mr. Ivey is a widely renowned Journalist.

Meet the President



President and Mrs. Harrell chat with Air Force Major General Homes in Houston

President Harrell was born in Elkin in the foothills of North Carolina's famous Blue Ridge Mountain Range. His father graduated with honors from what now is Emory University School of Dentistry and, at the age of 81, he has been practicing dentistry in Elkin for 57 years.

Jim Harrell was captain of his football team at Elkin High School, and he was chosen valedictorian of his class at graduation.

He attended the University of North Carolina and was chosen for membership in Alpha Epsilon Delta which is the National Honor Predental, Premedical Fraternity. He chose the "Dekes" as a social fraternity.

Jim Harrell chose the Medical College of Virginia for the study of dentistry. Upon graduation he was elected to alumni membership in Omicron Kappa Upsilon, the National Honor Society of Dentistry; also he was elected to membership in Sigma Zeta, Alpha Sigma Chi and, as a member of Psi Omega fraternity he served as president.

In June of 1945 he married Isabel Gibbs of Asheville.

Dr. Harrell served as a Naval Dental officer in World War II at Paris Island, South Carolina.

Dr. and Mrs. Harrell have 3 sons and a daughter. James A. Harrell, Jr. is building a dental office with our president in Elkin. His daughter, Deborah, is married to Bob Kirkman, III and they boast presenting Dr. and Mrs. Harrell with their first grandchild. Gavin plans a dental career to follow his brother, father and grandfather.

Steven is a freshman at Lenoir Rhyne College in Hickory. All three sons, along with their father, have had scouting's highest awards: Webelos, God and Country, and Eagle.

Dr. James Harrell has been a church school teacher in Elkin's First United Methodist Church for 26 years, along with other time consuming duties such as: Lay leader, chairman of the Board, and chairman of the Council on Ministries.

In 1970 he was Man of the Year in Elkin having served in all of the major offices of Kiwanis.

He served as a director of Hugh Chatham Memorial Hospital and the YMCA. He served for 6 years as a town commissioner before his election as mayor of Elkin.

He has served his profession as president of the Blue Ridge Dental Society, president of the 2nd District Dental Society, and as president of the Dental Foundation of North Carolina. He has served two terms as Vice-President of the North Carolina Dental Society before being elected to the post of President-Elect.

He is a fellow of the International College of Dentists, the American College of Dentists, and the Royal Society of Health in England. For many years he has been in *Who's Who in North Carolina in the Southeast*. This year he has been selected for *Who's Who in America*.

We are proud of our president and admire him for his past accomplishments, dedication to the service of his profession, and for his ability as a leader who is promoting better dental care for the citizens of North Carolina.



PRESIDENT'S REPORT

Challenge to New Members

I want to extend a warm welcome to each new member of our society and explain to them as well as the old members, what a great dental society we have here in North Carolina.

This is a very pleasant time in my life. First, because my son was recently installed as a member of the Second District Dental Society. Second, my father, a charter member, has been a member of the Second District for over 57 years and is still practicing daily. Third, it is a high honor for me to be representing you as President of the North Carolina Dental Society.

As president, I congratulate each one of you new members on becoming a member of your District Dental Society which automatically makes you a member of the North Carolina Dental Society, the oldest State Dental Society in the nation, and the American Dental Association, the largest dental organization in the world.

The North Carolina Dental Society has a proud history. It was organized and had its first meeting on October 16, 1856 in Raleigh, North Carolina. Its membership was limited to graduate alumni of dental colleges residing in North Carolina. This may sound strange, but we must remember that there was no law governing the practice of Dentistry until 1879 when the first dental law was passed, 23 years after the Dental Society was founded. Anyone who chose could practice dentistry be he "rich man, poor man, beggar man or thief," and if early history can be believed, we had some of each class. This has been only 94 years ago.

Just recently in the American Dental Association News the Blue Collar poll was published showing that dentists rated high among the twenty professions listed. For truthfulness the Clergymen were first and, Dentists second. For competence, physicians first and Dentists second. For altruism, clergymen first, physicians second, and dentists third. As a member of a great respected profession, with the confidence of the public behind us, we must be reminded with gratitude, of the hard work of many in the Dental Society through the years to build the respect and honor that our profession so proudly receives today. These first members upheld an ideal of professional conduct, which was to form the basis of a standard of morals, which **could** and **did** convert a **trade** into

a **profession** and led to the establishment of a Code of Ethics. It is recorded, during the first meeting of our Dental Society, that it was for the purpose of consultation upon the means best adapted to advance the science and the common interests and honor of the profession. Today, in our Constitution, Article II, the object of this Society shall be to cultivate the art and science of dentistry and its collateral branches; to elevate and sustain the professional character of dentists; and to promote among them mutual improvements and harmonious relations.

Now, let us look at a few of the many things our Society has done for us, after establishing a profession with respect and honor.

It created a House of Delegates, elected by us, and it is our supreme power to manage our profession by a representative type government. No longer can a small group of dentists run our Dental Society! Any member can attend the House of Delegates and **could** be recognized by the Speaker of the House. Any member **can attend** and **speak** at any of the reference committee meetings. This gives every member a voice in the affairs of his Society. Many states are just now forming a House of Delegates and many do not have one.

1950 marked the initiation and laying of the ground work for establishing our Dental School which ranks today the best. In 1951 the Society contributed over \$100,000 to establish the Dental Foundation, which you know of and, the many things that it has done for our profession. It pioneered the way for constructing the first Dental Research Building by contributing \$250,000. This stimulation by the dentists of North Carolina encouraged the University and the Federal Government to complete the funding. In 1966, the members of the North Carolina Dental Society again pledged \$35,000 towards architects fees for adding the fourth floor to the new building in the dental school complex. In 1970, ours was the first State Dental Society to have dental students as members of its House of Delegates. Subsequently a North Carolina Delegation resolution passed the House of Delegates of the American Dental Association to make students members of that legislative body. We are the first State Society to provide student membership in the State Dental Society.

(Continued on page 25)

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CHAPEL HILL, NORTH CAROLINA MONDAY OCTOBER 29 1973

Published Daily Except Saturday



JAMES W. BAWDEN

By PETE IVEY

The UNC School of Dentistry has been ranked the best in the nation.

In a survey of professional schools in 17 disciplines—including law, medicine, theology, public health, architecture, dentistry, library science, social work, journalism and others—the School of Dentistry is the only one in the country in the University's Professional Schools that is ranked in first place.

Carried out by Columbia University Sociologist Dr. Peter H. Blau under a grant from the National Science Foundation, the survey asked the deans of the top five schools in the country to name the five leading institutions in each of 17 disciplines. Harvard was ranked first among law schools. Columbia was first in

journalism and M.I.T. was first in engineering. Stanford was first in medicine. Berkeley was first in architecture. Yale was first in theology. Chicago was first in library science, and Columbia was first in social work. The survey, which appeared here, was published in *Change*, magazine a monthly journal devoted to higher education.

For the second consecutive year, three professional schools have been nationally ranked although there have been previous years when they ranked graduate departments and not the entire D.D.S. degree in such fields as physics and English. For example, the American Dental Association, in its annual rating studies of graduate programs in 1960 and 1970, and UNC ranked high in these surveys.

The School of Dentistry, headed by

Dean James W. Bawden, is 23 years old and was authorized by the N.C. General Assembly to begin operation in 1950 and enrolled its first students that year. The first DDS degrees were awarded in 1954 under the direction of Dr. John R. Harrell, then head of the school. The Dentistry School is one of the components of the Division of Health Sciences at UNC made up of a dental school, a medical school, a pharmacy, nursing, medicine, dentistry and public health.

The dental school has grown from 10 students in 1950 to the freshman class in 1950, to 491 enrolled in the school in the fall of 1973. Of these, 314 are dental students training to be dentists. The school maintains close ties with the world's foremost dentistry research centers, and its clinic for treatment of patients is considered

one of the best. Dental hygienists are trained for a four-year degree and there is a 10-month residency program in dental assisting. Correspondence-residency programs also are offered in dental assisting, dental hygiene and dental radiology. Graduate programs are conducted in orthodontics, pedodontics, periodontics, and prosthodontics.

The student body is comprised of North Carolina residents. Many graduates practice in the state. About 60 percent of the students are graduated from the school's 1954 now-practice in North Carolina. Providing more dentists in North Carolina was a primary objective for founding the school after World War II.

The school's research programs seek new methods of controlling

dental disease, and developing systems to make dentistry and dental health care more available to the public.

The school's Intramural Private Practice department exists as a major referral resource for dentists throughout the state and region for management of difficult cases.

The National Institute of Dental Research supports a pain control unit and clinics in the school. Research funds such as the function of the cerebral cortex, particularly in relation to pathways involved with pain transmission, and in blood coagulation, wound-healing processes, oral biology, speech functions, infections and endocrinology.

There are 113 faculty members in the school, in teaching, research,

(Continued on page 21)

UNIVERSITY OF NORTH CAROLINA DENTAL SCHOOL RANKED TOP

The University of North Carolina School of Dentistry has been ranked as the best in the nation in a survey of deans of professional schools around the country.

In the same survey, Duke University's Medical School was ranked in the top five in the country.

The survey results were published in *Change* magazine, a journal of higher education. The work was done by Dr. Peter M. Blau, a sociologist at Columbia University, and Rebecca Zames Margulies, a Ph.D. candidate at Columbia University, under a grant from the National Science Foundation.

The deans were asked to name what they considered to be the top five schools in each of 17 fields including law, medicine, theology, public health, architecture, dentistry, social work, journalism and library science.

The University of North Carolina Dental School enrolled its first students in 1950 and awarded its first degrees in 1954. There are 491 students enrolled in the school, 314 of them training to be dentists.

The school also has an extensive dental research program and offers graduate programs in endodontics, orthodontics, pedodontics, periodontics, prosthodontics, oral surgery and oral biology.

Ninety percent of the dental school's students are North Carolinians. It offers undergraduate degree and certificate programs in dental hygiene, dental assisting and dental auxiliary teacher education.

A pain control unit at the school is seeking new ways to ease discomfort for dental patients. It is supported by the National Institute of Dental Research.

Dr. James W. Bawden serves as Dean of the School of Dentistry.

EDITOR'S NOTE: Chancellor Taylor's letter is in response to a telegram from Dr. Harrell when he learned of this at the ADA meeting, in Houston, Texas.



THE UNIVERSITY OF NORTH CAROLINA
AT
CHAPEL HILL
27514

N. FEEBEE TAYLOR
Chancellor

November 6, 1973

Dr. James A. Harrell
President
North Carolina Dental Society
Box 858
Elkin, North Carolina 28621

Dear Dr. Harrell:

We appreciate your thoughtful telegram concerning the recognition afforded the School of Dentistry for the excellence of its programs. We, too, are delighted with this national standing.

I recognize full well that the support of the North Carolina Dental Society has been of extreme importance in development of the School. Your moral, political and financial commitment has provided a level of achievement which would have otherwise been impossible. We are most grateful to you and the members of the Society. I look forward to continuing mutual efforts to improve the health and well-being of all North Carolinians.

Cordially,

N. Feebee Taylor

The University of North Carolina at Chapel Hill is a constituent institution of THE UNIVERSITY OF NORTH CAROLINA — William C. Friday, President



Dean James Wyatt Bawden

Dean Bawden's resignation effective July 1, 1974, came as a disappointment to the faculty of the School of Dentistry as well as to the dental profession in North Carolina. Dr. Bawden has served as Dean since 1966. He is the second Dean of the School of Dentistry succeeding the late John C. Brauer. Dr. Bawden will take a year leave of absence at the University of Lund, Malmo, Sweden in order to recapture his skills in clinical pedodontics and research. Afterwards he will return as Professor of Pedodontics where he will resume teaching and research.

Dr. Bawden's immediate response to the School of Dentistry being publicized as first in the nation was as follows: "If this be true it is due to: (1) Support from the people of North Carolina, (2) Support from the legislature of North Carolina, (3) Support from the University administration and its fine rapport with the School of Dentistry, (4) The faculty and, (5) Support of the alumni and student body of the School of Dentistry."

A noble individual has led our School of Dentistry during the past eight years as we have witnessed its greatest growth and development. To this educator, and servant to this Great University, and the Great State of North Carolina, James Wyatt Bawden, we dedicate the January, 1974 issue of the NORTH CAROLINA DENTAL JOURNAL.

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Nisbet President of Rams Club, The Educational Foundation, Inc.

EDITOR'S NOTE: Dentistry is indeed proud to have Dr. Nisbet as president of the Ram's Club. This is just another example of dentistry's contribution to and participation in the mainstream of life.



Dr. Thomas G. Nisbet

Thomas G. Nisbet was born in Charlotte, North Carolina, in 1912. He received his A.B. degree at the University of North Carolina and his D.D.S. from Emory University. Since 1948 his practice has been limited to Periodontics. He is a Fellow in the International College of Dentists and is current President of the Dental Foundation of North Carolina, Inc.

His wife is the former Doris Sheffler of Springfield, Illinois.

Dr. Nisbet has many interests. Other than UNC sports, his real long-range hobby has been raising registered polled Hereford cattle on the family home place near Charlotte.

THE EDUCATIONAL FOUNDATION, INC.

The Educational Foundation, Inc., was established at the University of North Carolina in 1938. The purpose of this foundation is to raise funds for providing scholarships or grants-in-aid at the University to worthy and qualified high school students with athletic ability.

The Educational Foundation operates on a dignified and realistic plane in compliance with all of the regulations of the National Collegiate Athletic Association and the Atlantic

Coast Conference. It has the blessing and the goodwill of all University administration, and in its unique field occupies a status similar to that of the Business Foundation, the Medical Foundation, the *Dental Foundation*, and other money-raising organizations working for the benefit of the University.

The full amount of the donations of the foundation's members is used for scholarships and grants. The organization has no administrative expense. The Educational Foundation currently has over 2,500 members, who finance a scholarship program that costs over \$500,000 a year.

Since its inauguration in 1938 the foundation has provided scholarships, either partial or full, for over 2,000 student-athletes. Membership in the Rams Club is restricted to those who contribute \$100 or more. There is an endowment program for athletic scholarships. At the present time there are seven endowed scholarships, and ten members who are contributing toward an endowed scholarship. Under this program there are life memberships available and also accept wills and bequests to the athletic program.

All athletic scholarships awarded by the University are made possible by the generosity of foundation members.

Use of a Home Oven in a Dental Office for Instrument Sterilization

Albert N. Rabin, B.A., M.S.*
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INTRODUCTION

The need to control microorganisms to prevent cross infections in clinical dentistry is well established. One milliliter of saliva from an average healthy individual contains about 7.5 hundred millions of microorganisms. Many patients carry bacteria or viruses pathogenic for the oral or respiratory passages of other persons. An increasing number of patients carry the viruses of infectious hepatitis or serum hepatitis in their blood². These viruses may also contaminate the patient's saliva by way of crevicular fluid which enters the mouth from periodontal tissues¹. The dentist must guard against transmitting these microbes from one patient to another by way of his instruments. Infectious microorganisms can remain viable on dental instruments for days under films of saliva and blood⁷. Hepatitis viruses can be transmitted by as little as 10^4 ml of blood from an infected patient. The incidence of hepatitis may be as high as 6 percent of the population and most patients are asymptomatic³.

Sterilization is the means by which all microorganisms including the resistant hepatitis viruses are destroyed. This includes all forms of viruses, *Rickettsia*, bacteria, fungi and protozoa.

Heat is the most effective and reliable method of sterilization. Dry heat sterilization is useful and preferable in dental usage because moisture tends to corrode carbon steel instruments and to make them dull although there are ways of protecting them in the autoclave⁶. Dry heat temperatures must be kept below 345°F (174°C) because solder used to join some instruments melts at 350°F (176°C)³.

Dentists often inquire about the feasibility of using a home oven (in a home range or built-in style) in their operatories to sterilize various types of dental instruments. This study was undertaken to determine whether an ordinary home range type of oven could be used to safely sterilize dental instruments at or above the temperature required (320°F or 160°C)^{2, 3, 7} within an hour.

MATERIALS AND METHODS

Dental instruments were sterilized in a General Electric Model J302 Budget Conventional oven (6624 cu. in. capacity). This model heats the oven with two heating elements, one on top and one on bottom, to maintain an even oven temperature. The oven was calibrated to a temperature of 340°F (172°C). Ten dental instruments packs and a rack of twelve dental instrument tubes were placed in a preheated oven. The end of a thermocouple was placed inside an instrument pack and the temperature inside the pack was recorded for 30 minutes using an indicating pyrometer (Blue M Electric Co., Blue Island, Ill.). Results of the instrument pack temperature are found in Table 2.

The dental instrument pack was composed of a mixture of 12 scalers and curettes wrapped in a paper bag. Tubes of instruments were prepared with 6 to 10 endodontic files and reamers placed in a metal capped test tube. To test for sterility, duplicate strips of filter paper impregnated with 5×10^5 spores of *Bacillus subtilis* var. *globigii* (lot number G 711112, Becton and Dickinson Co., Raleigh, N. C.) were wrapped in aluminum foil and placed into four instrument packs and two test tubes containing reamers and files. All ten packs and twelve tubes (including those with test strips) were

placed in the oven, preheated to 340°F for 15, 30, 40, and 60 minutes. The instruments were cooled to room temperature and the spore strips were then incubated in trypticase soy broth at 98°F (37°C) for 72 hours. Turbid growth of the test organism during this period was an indication of non-sterilization.

In an effort to standardize the sterilization procedure and render it most applicable for a private dental office, the following test was performed in duplicate. Four dental trays were set up so that each contained 12 dental instruments and two test tubes of endodontic instruments. Duplicate spore strips were placed on each tray and into each test tube and then the trays were covered with aluminum foil. These four trays were wrapped and stacked one on top of the other in a room temperature oven. This constituted a maximum load for this oven. Starting with a cold oven, the thermostat dial was turned to a setting at 340°F and periodic oven temperature determinations were taken. At the end of 60 minutes, the oven was turned off and the trays were removed. The spore strips were incubated in trypticase soy broth at 98°F for 72 hours.

A control test was performed to determine the killing time of *B. subtilis* spores. Quantitative counts of 5×10^5 spores per test strip exposed to 320°F $\pm 1^\circ$ or 160°C $\pm 0.5^\circ$ for various intervals were tested in an accurate thermal furnace (Haskins Thermal Furnace Type FH, 305). After cooling to room temperature, the spore strips were serially diluted and incubated on trypticase soy agar plates at 98°F for 72 hours.

RESULTS

Results in Table 1 list the temperatures obtained inside the instrument

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packs when a preheated oven was loaded with 10 instrument packs. Packs maintained a consistent temperature within the range of 332° to 340°F necessary for sterilization. The melting temperature of 350°F of the solder used in the instruments was not exceeded and the integrity of all instruments was maintained.

Table 1

Stability of Temperature Inside Instrument Packs During Sterilization in an Oven Pre-heated to 340°F with the Instruments in Place

Time in Minutes	Temperature °F
5	335
10	340
15	332
20	336
30	337

Table 2 shows the killing rate of organisms in an oven with the thermostat set at 340°F when the preheated oven was loaded with 10 packs and a rack of 12 tubes. A temperature of 320°F was reached in 20 minutes. Spores not killed in 30 minutes were killed within 40 minutes. The minimum time required to sterilize the instruments with dry heat in a preheated oven set at 340°F was 40 minutes.

Table 2

A Qualitative Test of Spore Viability After Dry Heat Sterilization at 340°F Using 5 x 10⁶ Spores Per Strip*

Heating Time in Minutes	Growth of Spores in Instrument Packs	Growth of Spores in Instrument Tubes
0	+	+
15	+	—
30	+	—
40	—	—
60	—	—

* Instruments were loaded into the heated oven. Spore test strips were removed at the above times.

Table 3 denotes the temperature required to kill different populations of test spores in an oven without instruments. These tests were performed in a

Table 3

Quantitative Counts of Spore Viability After Dry Heat Sterilization at 320°F Using 5 x 10⁶ Spores Per Strip*

Heating Time in Minutes	Spore Count Estimates
0	2 x 10 ⁶
2	2 x 10 ⁶
6	2 x 10 ⁶
8	0
10	0

* Spore strips were inserted on a wire into a carefully controlled research oven already adjusted to 320°F (160°C). This temperature (320°F) is the accepted minimum temperature for sterilization of instruments by dry heat. The higher temperature of 340°F is a more desirable mean temperature for practical use allowing for oven variation.

preheated research oven in such a way that heat loss during the introduction of spores was no more than 1°F. Heating for 8 minutes (with less than 1°F variation at 320°F) killed all spores tested.

DISCUSSION

An accepted criterion for testing sterilization is the destruction of certain bacterial spores. It is assumed that if the heated spores fail to grow, then all microorganisms present are killed^{2,3}.

Bacillus subtilis spores are highly resistant to dry heat and serve as a good test organism for determining sterility⁵⁻⁶. Data presented here show that *B. subtilis* spores survived heating to 340°F for 30 minutes in an instrument pack but the spores were killed when heated to this temperature for 40 minutes. It is therefore concluded that heating of clean instruments to 340°F in a similar oven should provide sterilization in 60 minutes with an estimated 20 minute safety period. This should be confirmed for each oven installed in a private office.

For the dentist in private practice, dry heat assures sterilization provided that the proper temperature and time are employed. We have found that placing dental instruments in a cold oven and setting the oven to 340°F for one hour affords complete sterilization. This setting allows 20 minutes for heating to temperature and 40 minutes for sterilizing. This presumes that whatever oven is used will reach sterilization temperature within 20 minutes. When beginning with a cold oven, instruments should be heated for a total of 1½ hours at least to allow 15 minutes as a safety factor.

There are several kinds of dry heat sterilizers available for dental offices. One type is the commercial (dry heat) sterilizer for office use (e.g. Dri-Clave, Dri-Clave Corp., Westbury, N. Y. or Omniclave, Pelton & Crane Co., Charlotte, N. C.). Another type is a standard home oven or cooking range oven. The home oven and the office dry heat sterilizers are comparable in price. The home oven type has certain advantages for a dental practice. For one, the oven has a much larger instrument capacity (internal capacity of the oven is 6624 cu. in., capacity of the Dri-Clave is 676 cu. in.). In addition, a floor type range has top burners which makes it more versatile. Small dry heat ovens for of-

fice use however, take up less space, cost less to operate and are portable.

When installing a dry heat oven in an operatory it is important to calibrate the temperature settings to check instrument temperature during the sterilization cycle using a pyrometer. This assures sterilization and protects the instruments from over heating. It is also desirable to perform sterility checks using spore test organisms to assure complete sterilization of instruments by adequate temperature and time of exposure required to destroy spores. Commercial sources supply test strips and provide a culture service if the strips are returned by mail (Castle division, Sybron Corp., Rochester, N. Y.; 3 M Corp., Bio. Med. Division, Bacteriology Lab. Inc., Burlington, N. C.)

It must be emphasized that all instruments for dry heat sterilization must be cleaned and dried before sterilization. Cleaning is most thoroughly and most safely performed by sonication⁴. Carbon steel instruments (e.g. periodontal curettes) that are placed in packs while still wet may rust.

There are some objections to using dry heat sterilization. One disadvantage is that heat sensitive products are destroyed in an oven. Also it takes more time to sterilize instruments with dry heat than in a steam autoclave. However, in our opinion, the advantages of dry heat sterilization often far outweigh the disadvantages in a dental office. Dry heat is simple to use and requires little attention. It is safe for instruments and will not corrode, pit or dull metal at the mean temperatures indicated of 340°-345°F. The cost of buying and operating a dry heat oven is reasonable.

ACKNOWLEDGEMENTS

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Vestibuloplasty and Floor-of-Mouth Revision With Application of a Split-Thickness Skin Graft

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The problem of providing a comfortable, well tolerated, aesthetically pleasing denture on an atrophic mandible is one that constantly plagues dentists. Over the years a number of surgical techniques have been devised to improve the denture-bearing surface of the atrophic mandible; however, until recent application of split-thickness skin grafting techniques, the results of such surgery were far from predictable. Loss of from 50-90 percent of the surgically gained vestibular depth was common. Perhaps the most frequently used non-graft surgical approach is what is generally referred to as Clark's Technique.¹ In this technique a supra-periosteal dissection is carried out on the labial aspect of the mandible and the freed labial mucosal flap is undermined and sutured to the periosteum in the depth of the vestibule. The exposed periosteum is then allowed to heal by secondary epithelialization (or so-called "granulate-in"). (Figure 1 A, B, C).

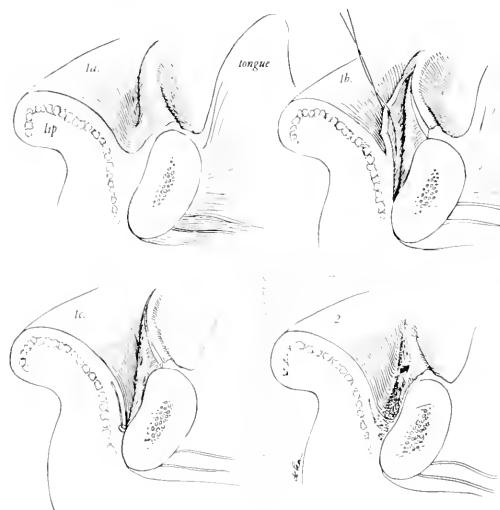


Fig. 1 (a). Sagittal section of anterior mandible showing decreased vestibular depth. (b). Supra-periosteal dissection carried to desired depth. (c). Labial flap undermined and sutured to establish new vestibular depth.
Fig. 2. As secondary epithelialization occurs the vestibular depth is gradually lost (arrow insert).

The technique that we currently employ for a mandibular vestibuloplasty is also a supraperiosteal dissection; however, a split thickness skin graft is then placed over the periosteum.² The periosteum, being fixed to the mandible, is essentially non-displaceable; and, when the skin is applied over the

periosteum, it provides a stable denture-bearing surface. The skin graft also aids in preventing the migration of the junction of the labial mucosa and the attached gingiva toward the alveolar crest (Figure 2). This migration and loss of vestibular depth, which occurs more vigorously in the secondary epithelialization technique, is probably the result of functioning of the labial musculature and the formation, proliferation, and contraction of connective tissue. The supraperiosteal dissection is also carried out on the lingual aspect of the mandible in conjunction with repositioning of the mylohyoid muscle attachment more inferiorly and with a dissection of the superior portion of the attachment of the genioglossus muscle in the anterior lingual aspect of the mandible.

There are basically three etiologic factors which contribute to decreased vestibular depth: 1) removal of pathology, 2) trauma with an avulsion of a portion of the alveolus and/or closure of overlying lacerations, 3) idiopathic atrophy. Loss of vestibular depth secondary to any of these factors may be corrected by skin grafting procedures. However, it is necessary to have an adequate mandibular basal bone height on which to apply the skin graft. An adequate height is considered to be about 12 mm. from the inferior border of the mandible to the crest of the alveolar ridge. If such mandibular height is not available, then it is necessary to augment the ridge with a bone graft prior to placing a skin graft.

After a thorough pre-operative evaluation of the patient's medical history and physical examination, and in conjunction with establishing a probable etiology of the patient's inability to function properly with their current dentures, an over-extended impression is made of the existing mandibular arch. Stone casts are then poured and trimmed to simulate the anticipated vestibular depth. A clear acrylic tray is then constructed on the cast for use in making an impression of the mandible once the supraperiosteal dissection has been carried out. When the impression is made, it acts as a stent to hold the skin-graft in close approximation to the recipient bed. This prevents displacement of the graft and aids in the prevention of hematoma formation beneath the graft which might jeopardize the transfer of tissue fluids necessary for the viability of the graft during the first few post-operative days.

Surgical Procedure

With the patient under general anesthesia, the face, oral-cavity and donor site (either the hip or anterior thigh) are prepped and draped in a sterile fashion. Using a dermatome, a split thickness skin graft is taken approximately .016 of an inch in thickness, 10-15 cm. in length and approximately 4-8 cm. in width (Figure 3). The skin graft is then rolled in moist gauze and attention is directed intra-orally.

The labial mucosa is infiltrated supraperiosteally with lidocaine 1-2 percent and epinephrine 1:100,000 to aid in dis-



Fig. 3. Split thickness skin graft .016 inches thick.

section and hemostasis. An incision is made from the depth of the vestibule in the second molar region vertically to the junction of the attached and unattached gingiva. This incision is extended along this junction around to the opposite side of the arch (Figure 4, A, B). A supraperiosteal dissection is then carried out on the labial aspect with care being taken to preserve the integrity of the mental neurovascular bundles (Figure 4, C, D). Should the bundle exit at the crest of the ridge, it is repositioned inferiorly at this time by extension of the mental foramen.

Attention is then directed to the lingual dissection. The mucosa is infiltrated with lidocaine and epinephrine 1:100,000 and an incision is made along the junction of the attached

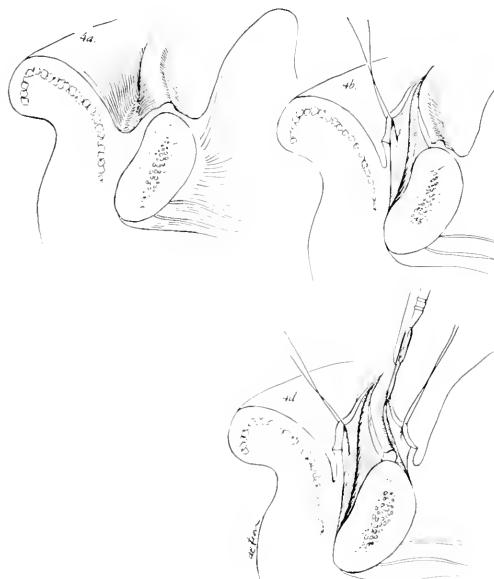


Fig. 4 (a). Sagittal section of anterior mandible showing decreased, vestibular depth. (b). Supra-periosteal dissection carried to desired vestibular depth. (c). Supra-periosteal dissection revealing mental neuro-vascular bundle. (d). Incision and beginning of supra-periosteal dissection on lingual aspect.

Normal Anatomy

Atrophy

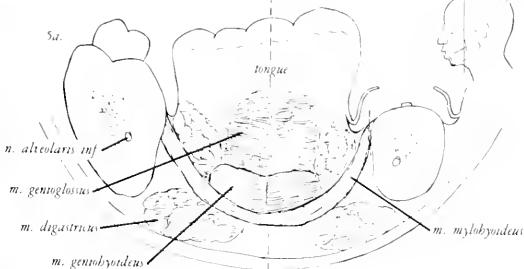


Fig. 5 (a). Frontal section showing attachment of mylohyoid on normal mandibular alveoli (left) and atrophic ridge (right). (b). Incised and repositioned mylohyoid muscle and new labial and lingual vestibular depth gained by inferior positioning of labial and lingual flaps.

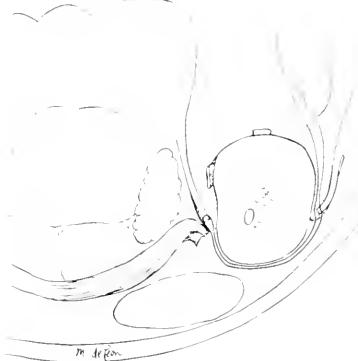
and unattached gingiva and a supraperiosteal dissection is carried out bilaterally until the mylohyoid and genioglossus muscles are identified. The mylohyoid muscle is then incised and dissected free from the mandible (It will be repositioned and allowed to attach to the mandible in a more inferior position) (Figure 5 A, B). The superior portion of the genioglossus muscle is released in a similar manner. The labial and lingual flaps are then undermined and repositioned inferiorly by using six to eight inframandibular sutures (Figure 6 A, B). If there is redundant or excessive fibrous tissue along the crest of the attached gingiva, this may be excised at this time if desired.

Using the previously constructed stent, a compound or rubber base impression is made of the mandible. If compound is used, it is lined with Guttaform (a material that moulds readily at body temperature) and a "wash" impression is made of the mandible. Utilization of this latter material aids in producing an even distribution of tissue displacement over the graft thereby preventing any pressure necrosis. The skin is then placed as a lining in the impression and the stent is seated in position over the ridge (Figure 6 C). Two circummandibular sutures are used to hold the stent in place.

Post-Op Course

The average length of hospitalization for skin grafting procedures is about 4-5 days with the patient returning for removal of the stent in approximately seven to ten days following surgery. It has been our practice to wait three to six weeks before inserting the relined denture which may be worn until a new denture can be constructed (Figures 7 and 8).

Following delivery of the dentures, similar care must be taken to adjust dentures overlying skin graft as would be employed for conventional dentures. This may be somewhat more difficult because of the nature of the skin and the decreased sensation over the graft in that the patient may not have a typical sore spot. Instead, there is a tendency to develop a hyperkeratotic callous reaction which, if allowed to proliferate by inadequate denture adjustments, may produce an unstable denture. The only other difference from conventional denture construction and adjustment is that in order to prevent a proliferation of scar tissue which may tend to form at the junction between the graft and the oral mucosa, one should establish the denture border short of this junction for



the first six months following surgery. After this time the border may be extended to conventional maximum coverage.

The fine mesh gauze which was placed over the donor site as a dressing at the time of surgery usually comes off or is removed by washing approximately two weeks post-surgery. Healing of this area is usually uneventful with the only noticeable difference between it and the adjacent skin being a somewhat lighter color. This, however, presents no cosmetic problem due to the location of the donor site.

Discussion

Of primary importance when considering the possibilities of a mandibular vestibuloplasty with a split-thickness skin graft is the general health, age, and etiology of the patient's inability to tolerate their present dentures. As previously mentioned, our selection of patients has been primarily limited to those below 55 years of age because of generally better health and the probability of an increased number of years that the dentures will be worn.

Skin grafting techniques do offer several advantages: 1)

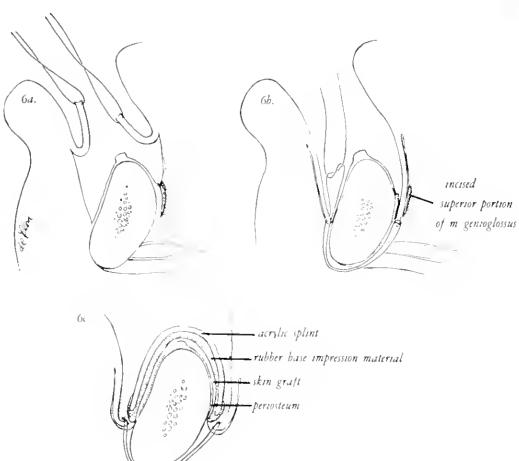


Fig. 6 (a). Undermined lobial and lingual flaps and incision of superior portion of genioglossus muscle. (b). Lobial and lingual flaps repositioned inferiorly by inframandibular suture. (c). Relationship of splint, impression material, graft, and periosteum.



Fig. 7. Pre-operative atrophic mandibular ridge with decreased vestibular depth.

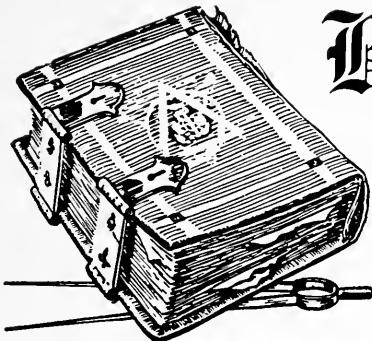


Fig. 8. Post-operative (same patient as above) following vestibuloplasty and floor of mouth revision with application of split thickness skin graft.

It increases the denture-bearing surface area, thus helping to reduce the rate of ridge resorption, 2) It maintains the vestibular depth by preventing the crestal migration of the junction of the free mucosa and the attached gingiva, 3) It provides a firm, essentially non-displaceable denture-bearing surface and 4) Decreased sensation over the skin graft may aid in denture comfort. It should be noted that while denture-bearing surface area will be increased, hopefully to reduce the rate of ridge resorption, that mandibular resorption does continue to some degree following the skin graft.

There are also some disadvantages to skin grafting procedures. First, the patient must be capable of tolerating approximately three hours of general anesthesia, and the procedure does necessitate the healing of a second operative site, i.e. the donor site. Post-operatively, most patients do experience some transient paresthesia over the distribution of the mental nerve for a period of from several days to several months. There is also the possibility of a few hair follicles being included in the skin graft, however, at the thickness that the skin graft is taken, this is generally not a problem. As with any grafting technique, there is also a possibility that

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Book Reviews

Endodontic Therapy. Franklin Weine, 432 pages, 650 illustrations. Index. Saint Louis, The C. V. Mosby Company, 1972.

The author addresses himself to "students and general practitioners who wish to make endodontics an integral part of their practice." The text consists of 15 chapters and covers a broad range of material and data. The author's style of writing is clear and understandable. The illustrations are numerous and add to the clarification of the writing. The type size, quality of the paper, and binding are attractive.

The first chapter is concerned with criteria for successful endodontic therapy including a discussion of indications and contraindications. In this reader's view the prognosis implied for teeth involving broken instruments, sclerosed canals, and dilacerations appears overly pessimistic. The second and third chapters concern themselves with diagnosis, treatment planning, and a discussion of diseases of the pulp and periapex. Chapter four contains a list of endodontic timetables which reflect the author's personal experiences. These tables offer a organized approach to endodontic therapy which, after spending some time in interpretation, may be of use to the practitioner. The bulk of the book, chapters five through eleven, is concerned with technical and scientific aspects of endodontic therapy and surgery.

The presentation of endodontic technique gives a good overall view of accepted therapies and includes discussion of both semisolid and solid canal filling materials. The author's choice of intracanal medicaments for various clinical conditions is one of personal choice, and one of the variables currently existing in endodontic therapy. The same can be said of his regimen of treatment followed for "hot" teeth.

The book concludes with chapters on endodontic-periodontal problems, endodontic microbiology, restorative treatment of endodontically treated teeth and drug therapy as an adjunct to endodontic therapy. The references for the book are numerous but somewhat limited in scope in that they reflect a somewhat national insularity.

The fact that some readers may not share many of the observations and conclusions of the author should not distract either the student or practitioner from the many values contained in this publication. Any reader who digests the contents of this book will have achieved a high degree of understanding in this recognized clinical discipline.

ERIC B. VANHUSS

McCracken's Removable Partial Prosthodontics. Davis Henderson/Victor L. Steffel. 477 pages, 585 illustrations. \$17.75. The C. V. Mosby Company, St. Louis, Missouri. Fourth Edition, 1973.

This edition represents an adept reorganization and revision of this important entry in any Removable Prosthetic library. It provides for better application for dental students, whereas earlier editions were considerably more proliferous. Its value as a reference text for the practicing dentist has not been diminished.

The sequencing of chapters is the most noticeable change. Parts and principles of partial denture components are reviewed prior to the important sections on surveying, diagnosis, and treatment planning.

Retained are the pages which are concerned with preparation of the mouth for removable partial dentures and the terse but important Schuyler Guide to Occlusal Adjustment. Additional consideration of occlusion is delegated to a chapter in which occlusal relationships for removable partial dentures are examined as well as the methods for establishing these relationships.

Laboratory procedures are explained in detail but are segregated into one chapter. All may profit from this section when writing the proper prescription to dental laboratories. Prescriptions (or work authorizations) are described and demonstrated in the text.

Other highlights include chapters on provision for support of distal extension partial denture bases through corrected impressions, refining, and rebasing — and a section is given to repairs and additions for the salvage of a broken or unusable partial.

The last section is labelled Miscellaneous Partial Prosthodontics. The cleft palate patient is shown as one of the special problems for prosthetic and other considerations. Another important and very specialized area of treatment is summarily described for the cancer or cancer-therapy patient, who can present monumental problems.

Therefore, this text can be described as ranging from broad-based principles which constitute the bulk of treatment procedures for the dentist to specialized techniques which provide the most effectual service for the patient—a good combination.

WEBB McCRAKEN

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The North Carolina Dental Auxiliary

The North Carolina Dental Auxiliary Grant Fund was formally established April 15, 1968. Subsequently, a document was developed outlining the procedure by which application for funds is to be made, and the manner in which review of such applications is to be conducted.

The North Carolina Dental Auxiliary Fund has participated in five projects, all of which have been deemed successful and significant.

The first project involved the allocation of \$5,000 to fund a dental hygiene position at the Murdoch Center. It was felt that the benefits of dental hygiene services at the Center would become apparent, and that the administration of the institution would move to establish a permanently funded position from state sources after one year of demonstration. The project precisely achieved its objective in that, upon termination of the Auxiliary Fund support, the Murdoch Center established a position for a dental hygienist and has continued her services ever since. The Director of Dental Services informs us that this has been a major step forward in providing good dental care for patients at the Center. The administration has expressed its gratitude to the Auxiliary Fund for its initiative in demonstrating the benefits to be derived through employment of a dental hygienist.

The second project was support of a nation-wide survey on dental student attitudes conducted by students at the University of North Carolina School of Dentistry. The survey was carried out in a most professional manner and the data collected have been made available to dental faculties in studying means to improve their educational programs. A paper has been published on the results of the survey and each school has received data on their students in a form permitting comparison to national norms. The consensus of opinion is that the survey achieved its objectives and has been a valuable source of information. The cost of \$750.00 was minimal considering the scope of information obtained.

The third activity undertaken by the Auxiliary Fund was support of Dr. Frank Law in development of a position paper describing the North Carolina Dental Society's preventive dentistry proposal submitted to the 1973 General Assembly. Dr. Law was supported primarily through a grant from the Division of Public Health of the HEW Bureau of Health Manpower, but additional funds were required to complete financing of his effort. An amount of \$4000 was set aside for that purpose but, in actual fact, the expenditure of only \$687.00 was necessary. The paper developed by Dr. Law served as the primary source document supporting the preventive dentistry bill

in the General Assembly. The Dental Society was successful in securing passage of the appropriate legislation and the Dental Auxiliary has participated in one of the most significant steps toward improvement of the dental health of all North Carolina citizens. The preventive dental program has attracted nation-wide attention as the most forward-looking plan of its kind ever submitted for consideration by a state legislature.

The fourth project involved funding partial salary support for a dental hygienist at the Fayetteville Veteran's Administration Hospital. The hygienist is being retained to establish a preventive dentistry program in the hospital and to provide instructional experience for dental hygiene students from the University of North Carolina at Chapel Hill and the Fayetteville Technical Institute. The Veteran's Administration Hospital offers a patient population with medical problems seldom, if ever, encountered in their teaching clinics. It is anticipated that the hospital will fund the position after one year, on a permanent basis.

The fifth activity involved allocation of funds to Broughton Hospital in the amount of \$7500 for support of a dental hygienist in the Dental Service of the Hospital. The hygienist will permit expansion of oral hygiene services available to patients in the institution. The position is supported along the same lines as the one funded at the Murdoch Center several years ago. It is anticipated that the institution will

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Betty Moye is this year's
Scrap Amalgam Director



President of North Carolina
Dental Auxiliary Bonnie Cashion



Carolyn Hinnont was last year's
Scrap Amalgam Director

Area Health Education Centers—A Means of Extending the Dental School Into Communities of the State

Charles L. Milone, D.D.S., M.P.H.*

EDITOR'S NOTE: Services in these community projects are under direct supervision of members of the faculty of the School of Dentistry.

The purpose of this article is to describe the development of Area Health Education Centers (AHEC) and their operation by the Health Sciences Division of the University of North Carolina, at Chapel Hill.

In October, 1970 the Carnegie Commission on Higher Education issued a Special Report and Recommendations entitled "Higher Education and the National Health." In this report the Commission pointed out that the crisis in the delivery of health care in the United States reflects combined influences of five interrelated and overlapping factors:

- (1) unmet needs for health care
- (2) rising expectations of the population for universal access to care
- (3) critical shortages in, and inefficient utilization of health manpower
- (4) ineffective financing
- (5) rapidly rising costs

The Commission recognized that innovative methods in the delivery of health care, principally the utilization of auxiliaries, will increase the effectiveness of the physician and the dentist; but the shortage of manpower is sufficiently acute that significantly more physicians and dentists need to be trained. Increased productivity of dentists is expected to offset the increased demand for services so that the recommendations for the number of dentists to be trained is based on maintaining the existing ratio of dentists to population. Science centers are urged to accelerate medical education and to

shorten the total duration of dental education. The essence of the recommendations is to streamline the education for health professionals.

In addition to being asked to increase efficiency in the education of health professionals, the university health science centers are also charged with the responsibility in their respective geographic areas to improve the organization of health care delivery in a changing social and economic environment. Area Health Education Centers (AHEC) are extensions of the University Health Science Center into underserved areas. Faculty from the University Health Science Center assigned to the AHEC are engaged in educational activities with students from the University and in continuing education with health professionals who practice in the area served by the AHEC. It is expected that the quality of care will be improved by the ready availability of continuing education. Furthermore, it is expected that the supply of manpower will be increased by the location of graduates who have become acquainted with the area during their educational experience.

The Division of Health Affairs, University of North Carolina at Chapel Hill is engaged in organizing AHECs in North Carolina. The University Health Science Center has developed a plan whereby areas served by certain hospitals are designated AHECs. An AHEC is established by written agreement between a public or non-profit hospital and the University. The AHEC serves an area of several counties through the smaller community hospitals, thus providing an indirect relationship between the University and the smaller communities. This allows

the University to respond to smaller communities throughout the state in a systematic way which builds upon the University faculty serving the AHEC. Generally the AHEC's correspond to state planning areas.

At present there are written agreements which have established the following AHECs.

(1) Area F—Charlotte Memorial Hospital serving counties of Mecklenburg, Cleveland, Gaston, Union, Lincoln, Rutherford and Anson.

(2) Area B — Memorial Mission Hospital and St. Joseph's Hospital in Asheville serving counties of Buncombe, Polk, Madison Mitchell, Transylvania and Yancey.

(3) Area L—Nash General Hospital in Rocky Mount, Edgecombe General Hospital in Tarboro, Halifax Memorial Hospital in Roanoke Rapids and Wilson Memorial Hospital in Wilson serving the counties of Wilson, Nash, Edgecombe, Halifax and Northampton.

(4) Area O—New Hanover Memorial Hospital in Wilmington serving counties of New Hanover, Brunswick, Columbus, and Pender.

(5) Wake Memorial Hospital at Raleigh serving counties of Wake, Johnston, Harnett and Franklin. Other AHEC's presently to be developed include the areas surrounding the cities of Greenville, Greensboro and Fayetteville. It is anticipated that eventually the state will be virtually covered by AHECs.

The entire Division of Health Sciences including the Schools of Dentistry, Medicine, Nursing, Pharmacy, and Public Health are involved in AHEC activity. Most of the activities of Medicine and Nursing are neces-

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sarily associated with the hospitals. The other schools have varying amounts of activity in the hospitals and elsewhere. For instance, the School of Public Health works quite closely with health departments. Activities of the various schools are coordinated by the office of the Project Director, Mr. Glenn Wilson, who is associate dean of the School of Medicine, U. N. C. at Chapel Hill.

Since dentistry for the most part is not practiced in hospitals, most of the dental activities will not directly involve the hospitals. Continuing education classes may in fact be given in the hospitals simply because there are facilities. Likewise, classes may be given in technical institutes or community colleges. The experience provided dental students is most likely to be in public facilities—health departments, hospitals and the public schools.

Each AHEC is assigned a member of the faculty of the School of Dentistry who is responsible for the coordination of AHEC dental activities. The faculty member will, if he has not already done so, work with the local dentists to assist in the planning of AHEC activities. These activities will vary among AHECs. Continuing education will be available in each AHEC from the University of North Carolina School of Dentistry. As stated in the April NORTH CAROLINA DENTAL JOURNAL by Dr. Roy Lindahl, Director of Continuing Education of the UNC School of Dentistry, a survey was made to identify interests in continuing education and a series of courses is being

developed. AHEC faculty members are in the process of determining interests in their respective AHECs. Dentists in each AHEC will be given an opportunity, or in some areas have already been given an opportunity, to express their interests. Each dentist is urged to express himself freely. Insofar as possible, the School of Dentistry will provide the courses most relevant to the needs of the dentists in each AHEC.

The AHEC faculty also feels that the education of the dental student can be considerably enhanced by experience in areas away from the Dental School. Students of the class of 1973 were assigned during the spring semester to participate in public health activities in New Hanover County. Summer externships were established for rising seniors in Asheville, Wilmington, Charlotte and Raleigh as well as some sites which are not in AHEC areas. These senior students have augmented the health services available by performing clinical dentistry under direct supervision of preceptors appointed by the School of Dentistry. The internship program at Charlotte Memorial Hospital as part of the AHEC activity will have additional faculty from the Dental School. These sites and preceptors have been approved by the Board of Dental Examiners of North Carolina.

Continuing education for dental auxiliaries is also available through AHEC. In fact, AHEC can provide a stimulus for providing additional training courses through community colleges and technical institutes if there is a

real need for such courses. The consortium of colleges and technical institutes in Area L. (Rocky Mount, Tarboro, Wilson, and Roanoke Rapids) is developing a course for associate degree nurses. It is planned in such a way that it can serve as the initial part of a course for baccalaureate nurses, and the first year should serve as the requirement for licensure as a licensed practical nurse. Thus, it is a development in the ladder of education, which is so much needed in health careers.

AHEC is a mechanism for making the resources of the School available to the private practitioner. Courses are immediately available, and perhaps, consultative types of services can be made available if there is interest. The AHEC faculty is committed to respond to the needs of the practicing dentists.

The ultimate objective of AHEC is to make available to the consumer a service of ever higher quality. This can best be done by enabling practitioners to provide a higher quality service and by encouraging students upon graduation to locate in an area where their services are badly needed. An immediate objective is to enrich the education of the dental students by providing them with realistic experiences. A continuing objective is to promote closer relationships between the Dental School and dentists in the communities throughout the State. This should enable us to accomplish the objectives in a pleasant atmosphere. The AHEC faculty needs ideas from practicing dentists and will appreciate any suggestions.

THE DENTAL FORUM (*Continued from page 4*)

A mandate was given to the Executive Committee of the North Carolina Dental Society at the 1973 House of Delegates to seek ways and means for completing the dental research program on expanded dental auxiliaries at the University of North Carolina, School of Dentistry. The House of Delegates charged the Executive Committee to introduce a law change, if necessary, to complete the research being conducted. Since this action, certain geographic areas having raised objections to the continuation in this *Search for Truth* in order to discover the *advantages and disadvantages* of the use of expanded dental auxiliaries, a dilemma exists.

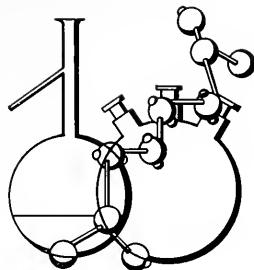
It would be a tragedy indeed if we in dentistry in

North Carolina cannot settle our problems, solve our differences and agree without embarrassing our profession before the state legislature and the nation. The latter could perhaps invite undesirable forms of socialized dentistry more rapidly than we realize.

The Dental Forum certainly has the potential for being a viable and productive group. We need somehow to resolve our differences through rational actions and rid ourselves of the deadlock in which we are now burdened.

It would appear that the intended purpose of The Dental Forum is not being fulfilled as planned.

It is really not a funny thing that has happened on the way to The Dental Forum.—RJS



inside dental research

Immunologic Response and Periodontal Disease

Myron S. Silverman, Ph.D.*

REVIEW OF THE LITERATURE

The initiating agents in periodontal disease have been shown by many workers to be the bacterial accumulations in plaque^{1, 2}. Which of the organisms or combinations of organisms are the direct cause must still be determined. Although the immediate etiological agents are doubtlessly the bacteria, their metabolic products, enzymes or endotoxins, evidence is accumulating that the pathogenesis of the disease is the result of the host's immunological reactions against these substances. This host response may lead to the chronic inflammation and bone loss characteristic of periodontal disease. It is the purpose of this review to present and assess the experimental data indicating that this is so. In addition an attempt will be made to present a working hypothesis of the pathogenesis of periodontal disease based on recent immunological research.

The earlier concepts that the immunological responses of the host were entirely beneficial to the individual have been shown to be incorrect. In some circumstances, these responses may lead to tissue damage. Data are accumulating which indicate that progressive chronic periodontal disease in

some instances, at least, may indeed be due to such injury.

It is well established that the response to foreign antigens involves two functionally different types of lymphocytes, both of which arise from stem cells in the bone marrow. One, termed the B lymphocyte, since it was initially described in the Bursa of Fabricius in fowl, develops into either antibody synthesizing lymphocytes or plasma cells. The second, the T lymphocyte, migrates from the bone marrow to the thymus. Here it undergoes maturation and modification which adapts it for its role in cell-mediated immune responses and for service as a collaborator with the B cell in the response to weak antigens. Examined under the light microscope these lymphocytes appear to be morphologically similar. However, by use of the scanning electron microscope, it has recently been shown by Polliack, *et al*³ that the B cell has many finger-like projections on its surface. The T cell, on the other hand, appears to be smooth, or to have only a few shorter projections. Antigenically they also differ in that T cells have a specific membrane antigen, the θ antigen. B cells have been shown by Pernis, *et al*⁴ and others to have antigen receptor sites on the membrane. These consist of immunoglobulins reacting with specific antigens. In response to some antigens,

macrophages also serve as "helper" cells, which in some manner present either a "processed" antigen or possibly "antigenic information" to the B cells⁵.

Interaction of the immunocompetent lymphocytes with the specific antigen for which they are genetically coded to respond causes them to undergo blast formation and mitosis. B cells develop into antibody synthesizing plasma cells and small lymphocytes. T cells also undergo blast formation and mitosis, but develop into small immunologically reactive cells. Some of the daughter cells of both types develop into memory cells, small lymphocytes capable of reacting rapidly and more efficiently upon subsequent contact with the specific antigen.

Both types of immune response may lead to a chain of events which is capable of causing inflammation and tissue damage. In order to establish that an immune response is occurring, it is necessary to determine whether the necessary components of the response can be found in the diseased tissue.

The presence of lymphocytes and plasma cells in inflamed gingival tissues has long been recognized. The standard texts in oral pathology report their presence, although the reports of the ratios of the number of plasma cells to lymphocytes may vary. Some report a

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greater percentage of lymphocytes, others a greater percentage of plasma cells⁶. These differences may merely be a reflection of the type of immune response which is occurring or the time sequence of the disease. Some antigens will induce an antibody response, in which plasma cells may be expected to predominate. Others will initiate a cell-mediated response. Therefore, a lymphocytic infiltration will be most prevalent. Since the antigenic stimulus in the oral tissues is most probably a combination of antigens giving rise to either or both responses, it is not surprising that one type of cell may be found in greater numbers in one individual or groups of individuals, while in others the other type may predominate. The essential thing is that the presence of either cell type is indicative of an immune reaction. This has been shown by Thonard and Dalbow⁷ who found antibody forming cells in gingival tissues of rats and hamsters after injection of sheep red blood cells into the mucogingival tissue of interdental papillae. Electron microscopic studies of gingival tissue have confirmed the presence of plasma cells containing immunoglobulins⁸.

In addition to antibody synthesized by cells localized in the gingival tissue, immunoglobulins have been detected in the gingival fluid^{8, 9-11} and in inflamed periodontal tissue¹².

Another serum component essential for the development of immunologically induced inflammation is complement. Complement consists of a group of eleven serum components which react sequentially after activation by the antigen-antibody complex or by endotoxin¹³. This results in a series of events that culminate in inflammation or cell lysis. The best studied example is the lysis of red blood cells or bacteria. In these reactions antibodies combined with the erythrocyte (or bacteria) activate the first component of complement. This in turn activates the other components, each of which have individual biological activity. Following complexing of all the complement components, lysis of the cell occurs due to formation of "holes" in the cell membrane. In addition, however, pharmacological mediators such as histamine, serotonin, a chemotactic factor for polymorphonuclear cells and a slow reacting substance (SRS) are released. These cause increased vascular permeability, contraction of smooth

muscle and infiltration of polymorphonuclear cells into the site of localization of antigen-antibody complexes.

In cell-mediated immunity, the immunologically sensitized lymphocyte secretes reactive non-antibody substances in the presence of antigen. These substances, called lymphokines, consist of several functionally different factors. Among these are a substance chemotactic for lymphocytes (and probably macrophages), a mitogenic factor inducing proliferation of lymphocytes, lymphotoxin, a cytotoxic substance, and a macrophage migration inhibition factor (MIF). The latter substance in the presence of antigen immobilizes macrophages at the site of antigen localization. A macrophage activating substance is also produced, which increases the phagocytic and bactericidal action of these cells. In the response to tumor cells, the cytotoxic action of the macrophages is also increased¹⁴.

These substances are responsible for cell infiltration into the injured tissue, increased vascular permeability and smooth muscle contraction with the end result being the typical inflammatory reaction.

Histological examination of diseased gingiva usually fails to show actual invasion of the tissue by bacteria. However, bacterial antigens, endotoxins and proteins have been detected. Wittwer, *et al*¹⁵ and Mayron and Loiselle¹⁶ using fluorescent labeled antibody have identified *Streptococcus mitis* antigens in the gingival tissues. In addition, Mayron and Loiselle also reported the presence of *Streptococcus salivarius* and *Neisseria catarrhalis* antigens. Ford¹⁷ demonstrated the penetration of *Mycoplasma salivarium* into the gingiva. Schwartz and his colleagues¹⁸ have shown that endotoxin of Gram negative bacteria can penetrate the intact gingival crevicular epithelium of dogs. Blair, Blair and Silverman¹⁹ and Alexander, Allen and Silverman²⁰ studied the localization of *Salmonella typhimurium* following injection into the mandibular labial gingival sulcus. Using fluorescent antibody techniques the organisms could be identified in sections of the cervical and submandibular lymph nodes as well as in the gingival tissue six hours after injection. Some of the organisms appeared to have been phagocytized by macrophages in cortical sinuses and medulla of the lymph nodes. Large and small

lymphocytes and plasma cells were apparent within 48 to 96 hours. Specific serum antibody titers were first detectable in 96 hours.

The ability of antigens localized in the gingival tissue to stimulate antibody synthesis has been shown by a number of previous investigators. Rizzo²¹, for instance, reported that although egg albumin could not penetrate the intact gingival sulcus epithelium of rabbits, if the epithelium was injured prior to application of the protein, penetration did occur. In rabbits previously hyperimmunized to the antigen, ulceration of the sulcus epithelium occurred together with signs of an "Arthus-like" inflammation. This indicated that a local antigen-antibody reaction occurred resulting in an immunologically induced inflammation and that antibody was present in the gingival tissue. Contrary to the results obtained by Schwartz, *et al*¹⁸, Rizzo was unable to demonstrate passage of bacterial endotoxin through intact epithelium after topical application. This difference is probably due to the difference in keratinization of dog and rabbit crevicular epithelium.

Young, *et al*²² have also reported that in mice the injection of bovine serum albumin or horse ferritin into the mandibular labial sulcus stimulated the appearance of "blast" cells and pre-plasmacytes in the cervical lymph nodes and circulating antibodies in blood serum. The labelling of cells by the uptake of ³H thymidine was used to identify the stimulated cells. These authors also reported the presence of "other more differentiated cell types" which take up the label. These unfortunately were not identified. One curious observation they reported was that although injection of horse ferritin resulted in the synthesis of specific antibody, the number of preplasma cells never was greater than in control animals. In fact, their data showed a decrease in preplasma cells during most of the period during which anti-ferritin antibodies were increasing in the serum. They suggest that perhaps the response occurred in the spleen rather than in the regional lymph node.

Extensive studies have been carried out to determine the specificity of both serum antibodies and gingival antibodies for oral bacteria. These have been detected in the serum and by skin tests in human subjects with varying degrees of periodontitis or localized gingivitis. Nisengard and Beut-

ner^{23, 24} were able to detect serum antibodies to plaque bacterial antigens. In addition they reported that serum antibodies and positive skin tests to *Actinomyces naeslundie* and *Actinomyces israelii* could be elicited. Both the serum antibody titers and the skin reactions were greater in individuals with more severe periodontitis. Berglund²⁵ using organ culture techniques and determination of serum antibodies against crude antigenic extracts from *Veillonella*, *Fusobacterium* and *Escherichia coli* showed that antibody was formed by cells in the gingiva. Serum antibodies against these organisms could also be detected. Steinberg²⁶ was able to detect antibodies against oral spirochetes in the sera of patients with moderate periodontal disease, but not in patients with advanced bone loss and tooth mobility. The absence of antibody in the more severe cases of periodontitis suggested that either the antibody was continuously being removed by the spirochetes in the gingiva or that a tolerance to the organisms developed as the disease progressed.

Studies similar to those of Rizzo²¹ were reported by Ranney²⁷ and Ranney and Zander²⁸. These authors were able to induce a hypersensitivity reaction in squirrel monkeys immunized previously to egg albumin by packing thread soaked with the antigen into the gingival crevice. The hypersensitivity was characterized by the development of chronic inflammation, proliferation of crevicular epithelium into the connective tissue and the appearance of microulceration of the pocket epithelium. Plasma cells containing antibody to ovalbumin could be detected in the gingival tissue and in the submandibular lymph nodes.

The data obtained by Ranney and Zander²⁸ suggest that both an immediate and a delayed type of hypersensitivity developed in the monkeys. Skin reactions to the antigen had characteristics of both responses.

The immediate type of hypersensitivity results from the activation of the pharmacological mediators following antigen-antibody reactions. It is best tested by injection of antigen into the skin of individuals. The appearance of erythema and wheal in two to four hours, and its disappearance in about twelve hours is the characteristic reaction. The delayed hypersensitivity reaction indicating a cell-mediated immune response appears eight to twelve

hours after injection of antigen intradermally. It usually persists longer. If the reaction is severe, necrosis may occur at the site of injection. The tuberculin reaction is the most familiar type of delayed reaction. Cell-mediated immunity may also be demonstrated by testing for lymphocyte proliferation, macrophage migration inhibiting factors and the cytotoxic factor produced by antigen sensitized lymphocytes.

Both immediate and delayed hypersensitivities to oral bacteria have been described. Nisengard and Beutner^{23, 24} in studies of patients with periodontitis showed that over 70 percent gave positive immediate reactions to a cell-free extract of *Actinomyces*. The percent of positive individuals could be correlated with the severity of the periodontal inflammation.

As discussed earlier the activation of complement by antigen-antibody complexes causes the release of a series of pharmacological agents which have been found to play a role in the development of the inflammation reaction. Additional studies by Snyderman, *et al*¹³ have shown that bacterial endotoxins can activate complement, thereby releasing a factor chemotactic for polymorphonuclear cells. The factor has been identified as a product of cleavage of the fifth component of complement (C5)²⁹.

The importance of the polymorphonuclear cell in periodontal disease and other inflammation diseases has been reviewed by Taichman³⁰. It lies not only in the phagocytic properties of these cells but also in the effects of the cell upon tissues. Phagocytosis leads to the death of the invading bacteria and to degranulation and lysis of the polymorphonuclear cell and the pouring of its lysosomes into the tissues. These consist of enzymes, cationic polypeptides and other substances which are injurious to the tissues.

Ivanyi and her colleagues³¹⁻³⁴ have been intensively studying cell-mediated immunity in patients to a number of oral bacteria considered to be important etiologic agents for periodontal disease. They have reported that lymphocytes from patients with gingivitis, mild or moderate periodontitis undergo transformation when cultured with ultrasonicated preparations of *Odontomyces viscosus*, *Veillonella alcalescens*, *Bacteroides melanogenicus* and *Fusobacterium fusiforme*. This is

indicative of a cellular immune response. In patients with severe periodontitis, however, transformation was depressed. The depression of response in this group was found to be due to antibody specifically reactive with the antigen used in the test. Serum from these persons suppressed the response of lymphocytes from individuals with gingivitis or mild periodontitis. Conversely if serum from an individual with a positive response or autologous serum absorbed with the specific antigen were used in the lymphocyte culture, cells from patients with severe periodontitis would respond. These data indicate that the blocking factor was probably humoral antibody.

These authors have also shown that in addition to the stimulation of lymphocytes by *Veillonella alcalescens*, cell-free supernate from the lymphocyte cultures contained macrophage migration inhibiting factor and cytotoxic factor³⁵. These were found in cultures of lymphocytes from patients with severe as well as mild periodontitis.

Horton, *et al*³⁶⁻³⁸ have found that dental plaque material and saliva also had a lymphoproliferative effect on lymphocytes. They reported that blood leukocytes cultured in the presence of dental plaque material produced a lymphotoxin which inhibited protein synthesis by human gingival fibroblasts and mouse L-fibroblasts. The substance produced by leukocyte cultures from patients with periodontal disease was significantly greater in its inhibitory action than that produced by clinically normal subjects or by non-stimulated lymphocytes. An additional factor found in plaque antigen-stimulated lymphocyte cultures caused bone resorption and an increase in the number of active osteoclasts in the femurs of 19 day fetal rat bones. This factor may be of importance in bone loss not only in periodontal disease, but also in other chronic inflammatory diseases such as rheumatoid arthritis and chronic osteomyelitis.

SUMMARY AND CONCLUSIONS

Inflammatory disease of the gingiva and periodontium is a result of many factors stemming from the initial effect of bacteria in the dental plaque. A number of bacterial species have been implicated as the etiologic agents. The enzymes secreted by these organisms, the endotoxins released from the bac-

terial cells after the death of the organisms and their metabolic products are capable of providing the initial insult to the gingival tissue. Most of the substances in addition to their direct toxic effects on the gingival tissue are antigenic. The data cited indicate that the host's response to these substances is of major importance in the development of gingivitis and chronic periodontitis. The infiltration of polymorphonuclear cells, macrophages and lymphocytes into the gingival tissue results not only from the chemotactic products of the bacteria, but also from the chemotactic substances produced during the immune response. The biological mediators liberated as a direct action of both the humoral and cellular immune responses act indiscriminately on the invading organism and on the host's tissues. The cytotoxic substances produced by lymphocytes, for example, are toxic not only for foreign cells such as tumors and foreign tissue transplants, but may also be cytotoxic for the host's normal tissues. The enzymes released by polymorphonuclear cells during phagocytosis and subsequent death of the polymorphonuclear cells may also act on the host's tissues. Thus, a chain reaction is triggered which can be terminated only by eliminating the triggering agent, plaque and its bacterial population.

Based on the information accumulating from research in immunology, pathogenesis of periodontal disease appears to be due to the immunological response of the host to the antigenic materials in dental plaque. Although the immune response initially is presumed to be protective in nature and directed specifically against the antigenic materials, non-specific substances produced by the antigen-antibody com-

plex and the antigen-stimulated lymphocytes may cause an indiscriminate destruction of soft tissue and bone loss characteristic of periodontal disease.

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GRAHAM, N. C. 27253

LETTERS to the Editor



Robert J. Shankle, D.D.S.
Editor-Publisher
NORTH CAROLINA DENTAL JOURNAL
Chapel Hill, North Carolina

Dear Dr. Shankle:

This is in response to the report submitted by the Dental Health Committee entitled, "Prison System—A Division of Department of Social Rehabilitation and Control," Vol. 56, No. 4, NORTH CAROLINA DENTAL JOURNAL, pp. 33-37.

It is not my intention to defend the condition of our dental program as it was presented in that report. I have found the report to be accurate and most constructive in its criticism.

A comprehensive health care program in a prison system must identify existing physical deficiencies in the resident, repair these deficiencies, maintain a high level of health during incarceration, and, to the maximum extent possible, prepare the inmate for his role as a contributing member of our society upon his release. I firmly believe that dentistry is an important and vital part in the delivery of this health care.

It is apparent that in the past this discipline has received insufficient attention and there has been little opportunity for dentists to participate in the decision-making process relating to their specialty, or to provide central guidance to an overall dental health program.

PRESIDENT'S REPORT (Continued from page 7)

During this year, 1973, the Society realizing that 98 percent of the people in North Carolina are affected by dental disease and that less than half of them receive any type of regular dental treatment, initiated a preventive dentistry program which the General Assembly appropriated funds to establish. (It is predicted that this program will reduce dental disease 25 percent in those under 20 years of age and 40 percent in those under 10 years of age after the plan has operated ten years, or by 1984). This is the first State to establish such a well planned State-wide program in preventive dentistry.

Just recently, our insurance commissioner granted a license for Delta Dental Plan of North Carolina. Our Society initiated this and has been laboring with it for several years, realizing that a non-profit dental insurance program would be a monumental success for the people of North Carolina, towards better dental health.

I congratulate you new members of The North Carolina Dental Society, and the American Dental Association. You can see that through these organizations, you have a wonderful opportunity to continue your education and be informed of the new developments in dentistry. I am sure that you will help continue and improve this great record of our society. Your active participation in various dental organizations will benefit you and will benefit the people of the great state of North Carolina.

JAMES A. HARRELL, D.D.S.

Before one can correct a problem, that problem must be recognized and defined. The report of the Dental Health Committee has been of significant value in defining the problem and in offering constructive recommendations to improve the dental care within our department. Positive response to these recommendations has already been implemented. Dr. Bill Dennis has been appointed as the Deputy Director for Dental Activities, and as such will be responsible to the Director of Medical Services for the coordination and implementation of a comprehensive dental health program for this department. In addition I have taken positive action to acquire new dental equipment to be installed in the North Carolina Correctional Center for Women. I am confident that continued positive actions will be taken to elevate the standard of dental care acceptable to this department and to your association.

I would like to express my gratitude to the members of the North Carolina Dental Society for their interest in our dental program, and ask for your continued interest and support in our efforts to improve the delivery of health care to the residents of our department.

Sincerely,

DAVID L. JONES, Secretary
State of North Carolina
Department of Social Rehabilitation and Control

GUEST EDITORIAL (Continued from page 5)

dedicated seekers after the truth who form the respected Fourth Estate and are necessary to the defense of our basic liberties under the Constitution, and whose dedication to accuracy is better than most professionals.

So, you will note the same positive and negative attitudes about other occupations and professions.

But, when stakes are down, and health and liberty and safety are paramount, the physicians, lawyers, press, dentists, bankers and merchants and manufacturers are among the most highly regarded of human beings.

It would be possible to take a poll, showing opinions of people about dentists. But it wouldn't prove much. What dentists *can* learn, and take to heart, are these injunctions: Keep on doing what you're doing in good dental care, but do it better. . . . Be aware of the financial status of others and make arrangements for amortized payment schedules, and especially pre-paid insurance possibilities. . . . When you give a complete diagnosis of what should be done in long-range dental health care for an individual patient, make sure he knows these are long-range, and that he has alternatives—and that the decision is *his* or *hers*. . . . In short, exert your usual courtesy and diplomacy that you have been taught in dental school and in accord with your usual charming personality.



NORTH CAROLINA DENTAL SOCIETY

(FOR MEMBERS AND THEIR IMMEDIATE FAMILIES)

PRESENTS

AN ENDODONTIC DENTAL SEMINAR IN

To be presented by:

Dr. R. J. Shankle

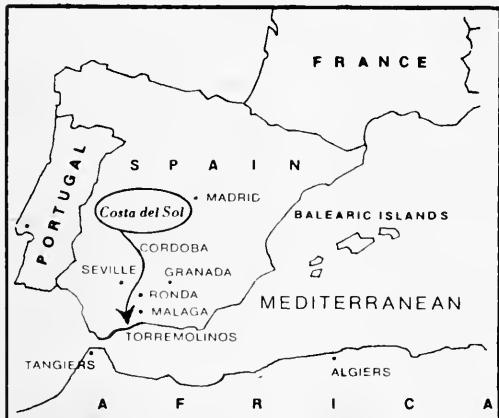
Professor and Chairman,
Department of Endodontics,
University of North Carolina

Topic: Practical Endodontic Techniques

Meeting schedule will be announced at
Departure.

Spain

COSTA del SOL



GREENSBORO DEPARTURE !

JULY 4TH HOLIDAY
JUNE 28 -
JULY 6, 1974
8 Days - 7 Nights

\$329 *

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YOUR TRIP INCLUDES:

- * ROUND TRIP JET TO SPAIN (MEALS & BEVERAGES SERVED ALOFT) ! EVENING DEPARTURE !
- * 8 DAYS & 7 NIGHTS at the ATALAYA PARK HOTEL, COSTA del SOL'S FINEST !
- * CONTINENTAL BREAKFAST & DINNER DAILY !
- * WELCOME SANGRIA (WINE & FRUIT PUNCH) PARTY !
- * FIESTA COCKTAIL PARTY with HORS D'OEUVRES !
- * GALA FAREWELL DINNER WITH WINE !
- * ALL FACILITIES at the ATALAYA PARK HOTEL, including UNLIMITED FREE GOLF at the HOTEL'S OWN CHAMPIONSHIP 18 HOLE GOLF COURSE
- * PRIVATE HEALTH CLUB AVAILABLE - with SAUNA BATHS & PROFESSIONAL MASSEURS !
- * EXCITING LOW-COST OPTIONAL TOURS AVAILABLE !
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Fun time is all the time! At the Atalaya Park, it's never a question of what to do, but what to do first. Swim in the Olympic pool filled with sparkling salt water from the Mediterranean. Move on to sailing, water-skiing, snorkeling and deep-sea fishing, horse-back riding, tennis and golf. For a change of pace, stroll through the Spanish countryside or relax in the lounge, enjoying cocktails, wines, and drinks of all countries. Discover the best in Continental, American and Spanish cuisine served in our quaint dining areas.

The fire and sparkle of nightfall at Atalaya is a combination of subdued lighting, internationally known bands and artists, and exciting Flamenco dancing. Intermingled with this gay Spanish evening is the romantic thrill of dancing under the stars on the inviting border of the Mediterranean Sea.

A paradise on earth, set between Gibraltar and Malaga, greets you with 325 days of sunshine and a yearly average temperature of 70°F. This eternal Spring-like weather blended with our crystal clear mountain water create the glorious color which surrounds you on all sides. Hotel "Atalaya Park," named for its own ancient Moorish Watchtower, is within easy reach of Ronda, bullfighting country, Granada, Cordoba, and Seville.

* LOW-COST OPTIONAL TOURS

BULLFIGHT	\$ 11.00
RONDA	10.00
GRANADA	12.50
SEVILLA	36.00
TANGIER - Plane	45.00
TANGIER - Hydrofoil	35.00
TORMELOLINOS by Night	12.00

* Prices subject to change
Tour arrangements are made from your hotel

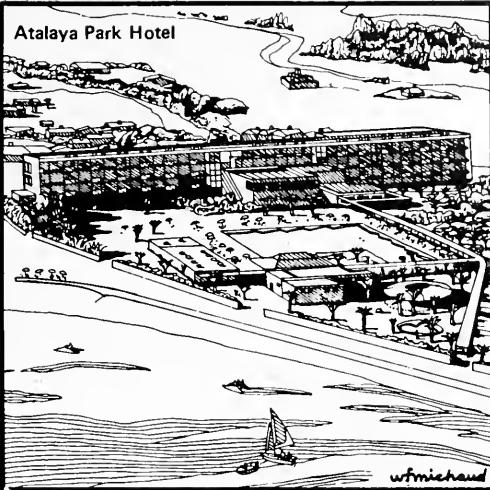
Seville and Cordoba

These are both typical yet very different Andalusian towns. In Seville, it's flowers and flamenco. In Cordoba, the Mesquita, a masterpiece of Moorish architecture is a definite must. Inside there's a forest of

painted columns and arches as far as the eye can see. All zebra-striped in red and white!

Granada

Cross the threshold of the Alhambra Palace and you're in the middle of the Arabian Nights. Have a fantasy. Lacy walls, painted ceilings, gold mosaics and splashing fountains—it's a dream-world come to life. The gardens of nearby Generalife are a delight to the nose as well as the eyes. But you'd better like jasmine. There are gypsies all over and the excursion to the caves of Sacromonte is a touristy put-on you probably should see once.



Take Me to Zee Casbah

Tangier. Straight out of an old Charles Boyer movie—and believe us, little has changed. In fact, little seems to have changed for hundreds of years. You're in the Casbah with its sprawling concentration of caftan-robed men and veiled women, donkeys, chickens, snake charmers, and bare-footed children. You're at the souks buying exotic goods at terrific prices, provided you bargain. And bargain. And bargain. Mysterious North Africa—it's like nothing you've ever imagined or ever seen. Except maybe in that old Charles Boyer movie

GENERAL INFORMATION: Deposits are accepted on a First-Come, First-Served basis as SPACE IS LIMITED! Final payment is due 60 days prior to departure. New bookings are accepted any time prior to departure providing space is available. Reservations may not be considered confirmed until deposits are accepted by Arthurs Travel Center. Information will be sent to you four to six weeks after your deposit is received. Cancellation without penalty will be permitted if written request is received 60 days before departure. Cancellation after 60 days will be subject to an administrative charge of \$25.00 per person and there will also be a charge for the pro rata air fare unless replacement is made from a waiting list; however, the availability of such replacement is not guaranteed. Refunds resulting from cancellations will take 8 to 10 weeks to process.

*Applicable government regulations require that air/land costs are quoted and that the air cost is subject to revision based on the actual number of participants; however, only the complete air/land package(s) described in this brochure is available. Price subject to change for currency fluctuation, any taxes imposed since the price of this trip has been set and enactment of applicable government regulations. **RESPONSIBILITY:** ARTHURS TRAVEL CENTER, INC. *and/or its associated agents act as agent only for all services furnished herein and EXPRESSLY DISCLAIM ALL RESPONSIBILITY OR LIABILITY OF ANY NATURE WHATSOEVER FOR LOSS, DAMAGE OR INJURY TO PROPERTY OR TO PERSON DUE TO ANY CAUSE WHATSOEVER occurring during the tour or tours described herein and for loss of trip time resulting from airline delays.

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* and North Carolina Dental Society

For further information, contact and mail deposits to: North Carolina Dental Society, 2310 Myron Dr., Raleigh, N.C. 27607

NOTE: To ensure that you are enrolled on the trip of your choice, make certain that you use this coupon !!!

-----RESERVATION COUPON-----

NORTH CAROLINA DENTAL SOCIETY: SPAIN June 28-July 6, 1974

Enclosed find deposit in the amount of \$.....(\$75.00 per person) forperson(s). Please enroll us(me).

NAME(S) _____ ADDRESS _____

CITY _____ STATE _____ ZIP _____ BUSINESS PHONE _____ HOME PHONE _____

ROOMING WITH _____ Children(ren) aged 14 years or under enrolled on trip, please list age(s) _____

Please check if Single Supplement is desired. ()

Please make checks payable to: North Carolina Dental Society

Indicate airplane seating preferred (Not guaranteed) Smoking Non-Smoking

NOTE: Information will be sent to you four to six weeks after your deposit is received.



first district news

Hicks Hamrick, Jr., D.D.S., Editor

The well attended First District Dental Society met at the Green Park Hotel in Blowing Rock, September 28, 29, and 30.

Dr. Carroll G. Bennett, Chairman of the Department of Pedodontics at the University of Florida School of Dentistry presented a program of "Prevention of Tooth Loss Through Pulp Therapy," and "Prevention of Arch Discrepancy Through Early Recognition and Interception."

Gene Reese and his local arrangements committee are to be commended on the success of the dance.

In his presidential address Dr. Hord announced that the Health Education



President Roberson of the First District is being congratulated by outgoing President Hord. Other officers from left to right: President-Elect Masse, Secretary-Treasurer Wells, Editor Hamrick and Vice President Graham.

Commission of Western North Carolina is now in operation. As a result qualified lectures and clinicians in dentistry, medicine, and nursing are being brought into the far western areas of North Carolina. Furthermore, the National Health Service Corps has assigned dentists to areas in the First District Dental Society. This is an effort by the Federal Government to provide health care to areas where there are shortages of physicians and dentists.

President Hord further elaborated on educational needs in the First District and stated that three new study clubs have been organized during the past year.

He spoke briefly relative to the expanded duty auxiliary question and the research that is being conducted at the University of North Carolina School of Dentistry in Chapel Hill. He stated "We need answers to many questions about dental care delivery, then we can find a better way for ourselves and for our patients."



Carroll Bennett, lectures on pedodontics

In conclusion, he challenged the group to establish a favorable rapport with their patients and to show compassion as dedicated members of the health professions.

New members of the First District: Dr. Thomas Edward Howell, Hazelwood; Dr. Dan A. Hudsay, West Jefferson; Dr. Donald E. Smith, Hickory; Dr. John L. Hillsman, Black Mountain; Dr. June Borne Sayre, Hickory; Dr. John J. Miller, Newton; Dr. Robert C. Calhoun, Asheville; Dr. David Dillow, Hickory; Dr. Michael Borchardt, Gastonia; Dr. Thomas G. Johnson, Morganton; Dr. James M. Vollmer, Andrews; Dr. Marvin Herren, Sylva; Dr. James D. Vinson, Conover; Dr. Guy Huggins, Morganton; and Dr. J. Ronald Sain, Newton.



President Harrell congratulates new members of the First District

The charge to new members was given by Robert B. Litton of Shelby.

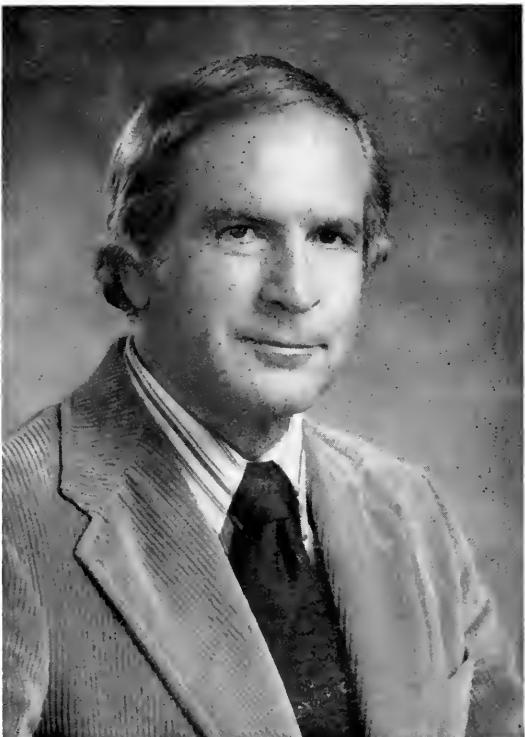
Officers of Auxiliary: Mrs. Milton Masse, President; Mrs. James H. Taylor, President-Elect; Mrs. John Bottoms, Secretary - Treasurer; Mrs. Corbin Williams, Vice-President; Mrs. Robert Litton, Historian.



second district news

James D. Blankenbeckler, D.D.S.

Editor



Dr. W. G. Ware

*EDITOR'S NOTE: Due to camera failure,
we regret no pictures from the Second
District.*

The Second District Dental Society held its fall meeting in Charlotte at the Downtowner Motor Hotel. It was a good weekend for all members attending, with numerous professional clinics and social activities for both the men and women.

Highlighting the activities for the ladies was a talk on astrology at the noon meeting on Sunday.

Speakers for the dentists included Dr. Baxter Sapp, Jr., of Durham and Dr. Guy Haddix of Statesville, both giving Projected Clinics on Saturday, September 9. Dr. James Clark of the University of Tennessee presented a clinic on Nutrition Sunday afternoon and, Dr. H. Paul Jacobi of Neenah, Wisconsin presented the program on Monday for the dentists, wives, and dental auxiliaries entitled "Successful Dental Practice."

New officers elected were: President, Dr. William G. Ware, Jr., of Winston-Salem; President-elect, Dr. Clarence F. Biddix, of Charlotte; Vice-President, Dr. Robert M. Wilkinson, of Winston-Salem; Secretary-Treasurer, Dr. Kenneth D. Owen, of Charlotte; and Editor, Dr. Donald D. Culp of Charlotte.



third district news

Jon W. Couch, D.D.S., Editor

Continuing Education in Dentistry was the theme and, a good time for all highlighted the Third District Dental Society's annual meeting at Greensboro's Holiday Inn Four Seasons. Members of the ThunderingThird were treated to an outstanding program and gala entertainment.

On Sunday, the popular mini-clinics were again presented. Dean James Bawden of the University of North Carolina School of Dentistry served as moderator as several members of the faculty presented interesting topics.

Dr. Thomas H. Shipmon, professor in denture prosthesis at the University of Tennessee College of Dentistry, was the featured clinician. His presentation on Sunday afternoon and Monday was excellent and well received.

President Joe Suggs of Asheboro presided at the first general session on Sunday. The necrology committee reported the deaths of Dr. Thomas R. Hinson of Burlington, Dr. Walter Grimsley of Asheboro, and Dr. C. C.



New Members of the Third District

Poindexter of Greensboro, all of whom had died since the last annual meeting.

Twenty new members were received into the Society during the session. After being presented for membership by Dr. Walter Morris, Jr., and approved by the membership at large, Dr. Charles Horton, president-elect of the North Carolina Dental Society gave the charge to the new members. Included were Doctors Ronald L. Page, Robert E. Brooks, Richard R. Black, Paul L. Powell, Marvin J. Black, James D. Kaley, George M. Puryear, Jeffrey P. Mazza, Benjamin A. Williams, David M. Simpson, Donald Westbrook, Charles L. Snow, Robert L. Campbell, Worth B. Gregory, Douglas D. Potter, Carl N. Bean, William H. Gordon, Edward M. Miller, Charles D. Allen, Jr. and Christopher G. KaKavas.

Earlier in the day, an orientation period for new members was held to explain the organization of the Society. It is hoped that by being fully informed each new member will become fully involved in his professional organization. President James Harrell of the North Carolina Dental Society had high praises for the effort shown in this pro-

gram for new members conducted by the Third District.

President Suggs' address emphasized the rapid progress and growth of dentistry during the 53 years the district society has been organized. He called upon the profession to be more active and more vocal on the interests of dentistry. Dr. Suggs charged his colleagues to be leaders or to be led.

Socially speaking, the Third District had fun. A buffet dinner, the President's Cocktail Party and, dancing highlighted Saturday's activities. On Sunday evening, following the social hour and dinner, the members were entertained by "The Executives," a banjo band specialized in instrumental and sing-along music. During the evening it became obvious that many outstanding dentists were frustrated "could have been" Al Jolsons.

New officers were installed at the final general session.



Shipmon in action at the Third District



Dr. Joe Suggs turns the gavel of the presidency over to Dr. Galen Quinn as President-Elect Field, Secretary-Treasurer Reap and Delegate Richard-son look on.



fourth district news

Vonnie B. Smith, D.D.S., Editor

On Friday, October 12, Dr. and Mrs. Jerry Mittleman of New York spoke to an audience of approximately 350 people on the topic "Getting Prevention Thru to Your Patients." Dr. Mittleman centered the morning portion of the program to common sense ways to initially motivate patients and then keep them motivated. Dentistry then truly becomes an investment and not a wild gamble. The afternoon portion of the program featured Bev Mittleman discussing practical nutrition by the dentist and his patients.



Above a.m.—Below p.m.

Saturday morning Dr. Larry Williams coordinated the eight table clinics and seven projected clinics.

Vonnie Smith captured the golf honors on Saturday afternoon.

At the Saturday night banquet President Fred Hasty installed the new officers and welcomed the new members.

In Dr. Hasty's presidential address he pleaded for the dentists of North Carolina to have an opportunity to continue their education by structured continuing education programs.



President Hasty of the Fourth District addresses members of the banquet.

Our president spoke briefly on the Expanded Duties Research Program at the University of North Carolina Research Center and urged support to assure that the study be completed. This being a very volatile subject, he invited those interested to attend the open forum breakfast the following morning where discussion could be held.

President Hasty praised Fourth District's Harold Maxwell and his leadership relative to the North Carolina Dental Political Action Committee, encouraging all members of the Fourth

District to give their support to this organization. Recognition was given to Glenn Bitler of the Fourth District for leadership in working tirelessly to make the Delta Dental plan a reality in North Carolina. He also praised Ray Carnavale, another member of the Fourth District for his fine leadership as chairman of the Federal Dental Services Commission. J. S. D. Nelson, member of the Fourth District, was recognized for his success in increasing daily insurance coverage for sickness and disability, and for the streamlining of our insurance programs.

Finally and, in conclusion, Dr. Hasty attributed the progress of dentistry in North Carolina to the fine leadership of yet another member of the Fourth District namely, the immediate Past President, Joseph M. Johnson.



From left to right: President-Elect Bitler, Secretary-Treasurer Grantham, President Wallace, Vice President Wood



New members of the Fourth District

"Smoke Gets In Your Eyes" was one of the twenty three songs sung by The New Century Platters that brought back pleasant memories for the members of the Fourth District Dental Society at their 53rd Annual Meeting in Fayetteville October 13, 14, and 15. The two part show by The Platters was the highlight of the entertainment portion of the three day week-end.

fifth district news

Wayne C. Anderson, D.D.S., Editor



President Kidd delivers his address to the Fifth District

The Fifth District Dental Society Meeting was held at the Wilmington Hilton, September 13 to September 15, with over 250 persons registered. At the Friday session, Dr. William Gilmore, Professor of Operative Dentistry at the University of Indiana, presented a program on "Current Concepts in Restorative Dentistry." On Saturday Dr. Gus Tucker introduced four table clinics. Dr. Ralph Setzler, Wilmington Periodontist, was selected from these to present his clinic on "Furcation Involvement" at the State Meeting in Pinehurst.

The Arrangements Committee under Chairman Will Hinnant and Co-chairman Wayne Atkinson were most successful. The social highlight was a luau and dance held Friday night.

President Bill Kidd reiterated Past President James Privett's pleas for the necessity of continuing education in dentistry.

President Kidd with the aid of several past presidents developed a log that will be presented to the incoming president. This log should assist the president in the performance of his duties.

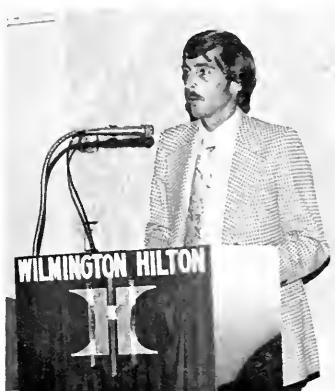
Dr. Kidd suggested that new members become integrated into the Fifth District organization during their early years of practice. This would not only

benefit the district dental society, but would benefit the newly elected member in becoming a vital participant in organized dentistry.

Dr. Kidd spoke with pride that the Fifth District has as many Study Clubs as the other four districts of our state society combined. We were informed that our district has more members in the Academy of General Dentistry than the other four districts of the North Carolina Dental Society. This being a very appropriate vehicle for pursuing continuing education on a regular schedule.

President Kidd spoke highly of the Delta Dental Plan and urged members to join this organization. Additionally he referred to the North Carolina Dental Political Action Committee and urged the members of the Fifth District Dental Society to give support to this organization.

In conclusion he related to the problem of attendance at Fifth District meetings by members of the Northeastern counties of the district. Stating that interest and attendance has declined, he pleaded for the widespread geographical dental population of the Fifth District Dental Society, to become unified and attend its meetings.



Executive Director Cherry reports



President Horrell addressing new members of the Fifth District at a breakfast in their honor.



New members of the Fifth District



Left to right: Newly elected officers—President Freshwater, Editor Anderson, President-Elect Miller, Secretary-Treasurer Homes and Vice President Keith.

Items of Interest



Dr. E. U. Austin

Austin Appointed 5th Trustee District Chairman. Dr. Edward U. Austin of Charlotte, N. C. was recently elected Chairman of the 5th Trustee District Organization of the American Dental Association having served three years as Secretary-Treasurer of the group. Dr. Austin is also serving his second term as Trustee of the American Society of Oral Surgeons from the Southeast district.

Worthy Note. Dr. O. C. Barker of Asheville completed sixty (60) years of practice this summer and is still practicing.

Tar Heel Endodontics Association Formed. A professional organization entitled the Tar Heel Endodontics Association was initiated at the annual meeting of the American Association of Endodontists in Dallas in April. The new organization has indicated by its charter, which was approved in June, that its purpose is to promote the study of endodontics by its members. The requirements for future candidates for active membership have been designated as follows: Diplomate of the American Board of Endodontics; educationally qualified to take the American Board of Endodontics Examination or; limited practice of endodontics consistent with the principles of ethics of the American Dental Association

and the North Carolina Dental Society.

The Charter Membership consists of the following dentists: Ben W. Brown, Raleigh; Luther H. Butler, Greensboro; Joe H. Camp, Charlotte; Gerald M. Cathey, Chapel Hill; Stuart B. Fountain, Greensboro; Jacob B. Freedland, Charlotte; Don C. Gerdes, Asheville; Alvin Goodman, Winston-Salem; Worth B. Gregory, Chapel Hill; John C. Hartness, Rocky Mount; Paul C. Lehman, Jacksonville; H. Wayne Mohorn, Greensboro; William C. Myers, Charlotte; R. Jack Shankle, Chapel Hill; Charles Snow, Chapel Hill; Eric B. Van Huss, Charlotte.

The officers of the new organization are: President—Stuart B. Fountain, Vice-President — Joe H. Camp, Secretary — William C. Myers.



Barbecue Texas Style at ADA Meeting in Houston.



Chairman of the Executive Committee Current chats with Professor Emeritus Kermit Knudtzon.



Governor Holshouser admiring NORTH CAROLINA DENTAL JOURNAL at a recent meeting with Society officers, Dean of the Dental School and State Board Representatives.



American Society of Dentistry for Children. Dr. Roy L. Lindahl showed Dr. Gary R. Klimen (right) of Rockville, Maryland, a new poster produced by the American Society of Dentistry for Children between sessions at the 1973 American Society of Dentistry for Children Seminar on Pedodontics July 22-26 in the ADA Building, Chicago. Dr. Lindahl, director of the office of continuing education at the University of North Carolina, is the immediate past president of American Society of Dentistry for Children and Dr. Klimen is general arrangements chairman for the 1974 ASDC annual meeting to be held in Washington, D. C.

Gastonia Man is Named to Health Board. A Gastonia dentist has been named by Governor Jim Holshouser to the State Commission for Health Services.

Dr. Richard P. Belton, 39, is one of five new members named to the 11-member state health board. He will serve four years.

Items of Interest

Fellows of the Academy of General Dentistry. Two dentists from North Carolina were inducted as Fellows of the Academy of General Dentistry at the Academy's 21st annual meeting in Houston. The Fellowship is awarded to members of the Academy who have maintained membership for five consecutive years and have taken 500 hours of continuing postgraduate education.

Receiving the Fellowship were: Drs. David R. Dunham of Fayetteville, and Willie T. Wilkens of Greensboro.

The Academy of General Dentistry is an organization of general dentists who believe that the professional man must continue his education throughout his professional career to provide the best service to the public. All members of the Academy participate in continuing education programs as a condition of membership.

Currently, Academy membership stands at 11,000, making it the second largest dental organization in the nation. It is also the fastest-growing organization in the U.S., drawing more than 200 new members each month.

The Academy's annual meeting and Convocation of Fellows was held October 24 through 27, 1973.

Human Bites of the Face. These are infrequently reported or reviewed in scientific literature. However, because of their importance as a potential cause of infection and disfigurement, human bites are the subject of a literature review and case report in the October, 1973 issue of the *Journal of Oral Surgery*, published by the American Dental Association.

Most reported incidents of human bites involve the extremities, but in those cases that involve the face or neck the bites are inflicted most frequently by young individuals in quarrels. These bites are also likely to occur among children at play and people in mental institutions, or during sexual assaults.

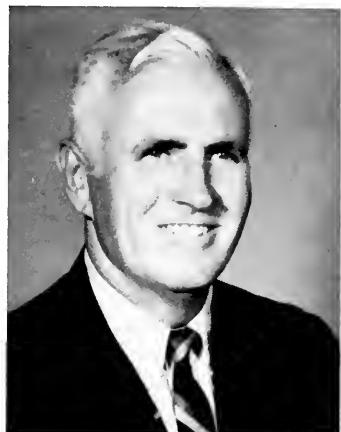
According to the article, it is not uncommon for many people to seek treatment several days after the biting incident since embarrassing circumstances are often involved. When bite wounds are seen in the later stages,

infection has ensued and home remedies have failed to stop the pain.

Because of the multitude of oral flora, the organisms involved in the wound are many. The fact that these microorganisms often become deeply embedded in the tissues renders the resultant infection difficult to treat.

There have been no reports of tetanus transmitted by human bite, although this possibility cannot be ruled out since tetanus organisms have been isolated in the oral cavity. Syphilis can be contracted from the bite of a person with active syphilis.

Federation Dentaire Internationale. 62nd Annual World Dental Congress, London 8-14 September 1974.



Dr. Guy Willis

to enroll its first class of dental students.

Willis Appointed to National Board Council Dr. Guy R. Willis has been appointed Chairman, Council of National Board of Dental Examiners. This is an American Dental Association Council and represents the National Board of Dental Examiners, which is composed of nine members, consisting of three each from the American Dental Association, American Association of Dental Schools, and the American Association of Dental Examiners.

Dr. Willis was originally appointed to this Council in 1969 and named Chairman of the Council at the past meeting of the American Dental Association in Houston.



THE TOWER OF LONDON

The Tower of London was built by William the Conqueror to guard the river approaches to the city, and though attacked many times in its long life as a fortress, it was never captured. It has also been used as a royal palace and as a state prison—Sir Walter Raleigh was kept here for thirteen years and spent his time studying chemistry and history. Among those beheaded on Tower Green were Ann Boleyn and Catherine Howard, two of the wives of Henry VIII; and Lady Jane Grey, who was Queen of England for nine days in 1553. The Crown Jewels are kept at the Tower.

Council on Dental Education. The State University of New York at Stony Brook has been granted permission by the ADA council on Dental Education



Your Executive Committee at work

Continuing Education

UNIVERSITY OF NORTH CAROLINA SCHOOL OF DENTISTRY CONTINUING EDUCATION COURSES

January 1974-July 1974

January 10-12

Pain Control and Nitrous Oxide Sedation
Department of Oral Surgery
Tuition—\$150.00

January 25

Tooth Colored Restorations
Operative Department
Tuition—\$60.00

February 8-9

Diagnosis & Treatment of Oral Facial Lesions
Department of Oral Surgery
Tuition—\$150.00

February 22

Solutions to Problems in Crowns & Bridges
Department of Fixed Prosthodontics
Tuition—\$75.00

March 18-19

Treatment of Occlusal Disharmonies
Department of Periodontics
Tuition—\$100.00

March 29-31

Cast Restorations with Gold Foil Like Margins
Department of Fixed Prosthodontics
Tuition—\$125.00

April 1

Role of the Dental Hygienist in the Detection and Treatment of Soft Tissue
Department of Dental Ecology
Tuition—\$30.00

April 2-3

Vitreous Carbon Implants in Dental Practice
Department of Oral Surgery
Tuition—\$75.00

April 4-6

Pre-Medication for Pain Control in Dental Practice
Department of Oral Surgery
Tuition—\$150.00

April 20-21

Changing Concepts in Oral Diagnosis
Department of Oral Diagnosis
Tuition—\$80.00

April 26

Gold Inlay Restorations
Operative Department
Tuition—\$60.00

April 29, 30 & May 1

Endodontics, 1974
Department of Endodontics
Tuition—\$150.00 plus kit at \$55.00

May 3-4

Fixed Prosthodontics for the General Practitioner
Department of Fixed Prosthodontics
Tuition—\$100.00

May 16

Positive Methods for Increasing Stability and Retention of Dentures
Removable Prosthodontics Department
Tuition—\$50.00

May 24

Amalgam Restorations
Operative Department
Tuition—\$60.00

June 3-7

Clinical Dental Hygiene
Dental Hygiene Department
Tuition—\$100.00

June 11-13

Current Concepts in Operative Dentistry
Operative Department Auxiliaries
Tuition—\$150.00, Dentists \$30.00,

Boston University School of Graduate Dentistry Fall Semester 1973 Continuing Education Courses

Periodontal Prosthesis

Gerald M. Kramer, D.M.D., Myron Nevins, D.D.S., Howard M. Skurow, D.D.S.

Enrollment limited to 12. Fee: \$185, May 5-7, 1974.

Participation Course in Three-Dimensional Filling of Root Canals with Warm Gutta Percha

Herbert Schilder, D.D.S., January 10-11, 1974. Fee: \$170.

Clinical Periodontal Surgery

Gerald M. Kramer, D.M.D., J David Kohn, D.D.S.

May 2-4, 1974. Fee: \$185

School of Dentistry University of Alabama In Birmingham Continuing Education Program

—January-February 1974

February 1, 2, 1974

Four-Handed Dentistry: Modern Concepts of Dental Assistant Utilization

Gertrude M. Sinnott, R.D.H., B.S.; Glen Robinson, D.M.D., M.P.H.; Phillip C. Hardee, B.S., D.M.D.; Edward McDevitt, C.D.T.; A. H. Wuchermann, D.M.D.

January 26, 27 and February 2, 3, 1974

Principles and Techniques of Periodontal Surgery for the General Practitioner

Robert Gray, D.M.D.; Thomas W. Weatherford, D.M.D., M.S.; Charles M. Cobb, D.D.S., M.S., Ph.D.; Paul J. Armstrong, D.M.D., M.S.

February 9, 10, 1974

Basic Begg Theory with Diagnosis and Demonstrations
H. G. Barrer, D.D.S.

February 16, 1974

Restorative Dentistry for Children
David L. Russell, D.M.D., M.S.

February 23, 24, 1974

Dental Radiography for Auxiliary Personnel

Lincoln R. Manson-Hing, D.M.D., M.S.

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The General Practitioner and Endodontics

Adeeb E. Thomas, D.M.D., M.S.

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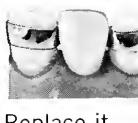
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1. Title of Publication: THE JOURNAL OF THE NORTH CAROLINA DENTAL SOCIETY.
2. Date of filing: September 17, 1973.
3. Frequency of issue: Quarterly — January, April, August, and September.
4. Location of known office of publication: 2310 Myron Drive, Raleigh, N. C. 27607.
5. Location of the headquarters or general business offices of the publishers: Same as above.
6. Names and addresses of publisher, editor, and managing editor:
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Editor: Dr. Robert J. Shankle, 2310 Myron Drive, Raleigh, N. C. 27607.
Managing Editor: Robert L. Cherry, 2310 Myron Drive, Raleigh, N. C. 27607.
7. Owner: North Carolina Dental Society, 2310 Myron Drive, Raleigh, N. C. 27607.
8. Known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities: None
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ROBERT L. CHERRY, Managing Editor

VESTIBULOPLASTY

(Continued from page 16)

the graft will not take; however, using the techniques described here, the incidence is minimal.

While these potential disadvantages do exist, they have been far outweighed by the benefits patients receive. This is readily illustrated by a recent survey conducted at our institution which showed that 11 out of 11 patients responding to the questions, "Were you glad you had the procedure done?" and "Would you go through the procedure again?" answered affirmatively. This patient enthusiasm is not only rewarding to the practitioner, but most encouraging towards the future use of skin grafting techniques.

In summary, while split-thickness grafting techniques do offer a proven method of giving a patient a utilizable alveolar ridge and, therefore, increased denture retention and stability, they are not a panacea for all patients who are unable to tolerate their present dentures. However, carefully selected patients will greatly benefit by this procedure.

REFERENCES

1. Clark, Henry B., Jr. *Practical Oral Surgery*. Third edition. Philadelphia: Lea & Febiger, 1965.
2. Davis, W. Howard, Richard J. Deto, Jay R. Weiner. *Handbook: Mandibular Vestibuloplasty with Skin Grafting*. Los Angeles: Southern California Oral Surgery Foundation, 1972.

BOOK REVIEWS

(Continued from page 17)

Dentistry and the Allergic Patient, Frazier, C. A., ed. 429 pages, illustrated. \$18.75. Charles C. Thomas, Publisher. Springfield, Ill. 1973

This intriguing title belies the duplication produced by a plethora of introductions and authors. Dr. Frazier is a prolific writer in secular as well as academic publications. He has assembled a series of papers contributed by twenty-one authors, four of whom are dentists. As is often the case when so many are involved, overlap of subjects is abundant. This has produced scattered clinically helpful information amid academic presentations. These presentations often make mention of rare and obscure conditions and syndromes without explanation. Despite these technicalities, a few common clinically significant conditions are omitted.

The chapter on Oral Manifestations of Allergy is well-organized, well-written and well-illustrated. This chapter is especially helpful in giving the differential diagnostic features of numerous conditions.

In summary, if the reader can wade through the duplications and technicalities, he will find that the book contains much useful and hard to collect information.

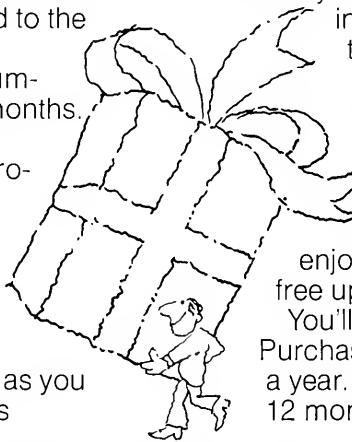
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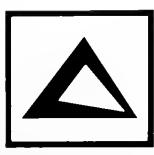


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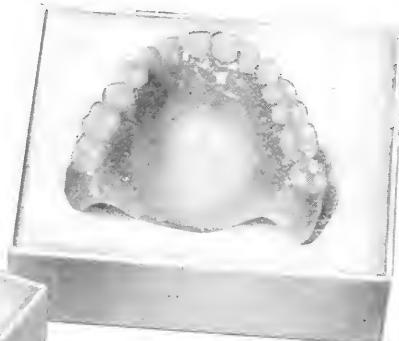
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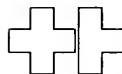


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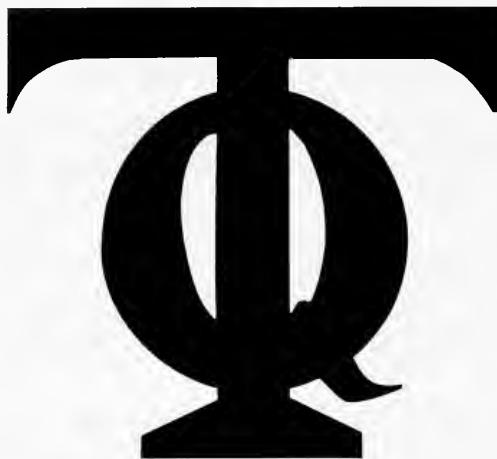
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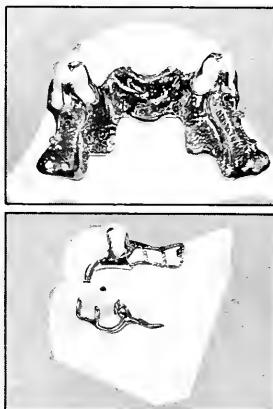


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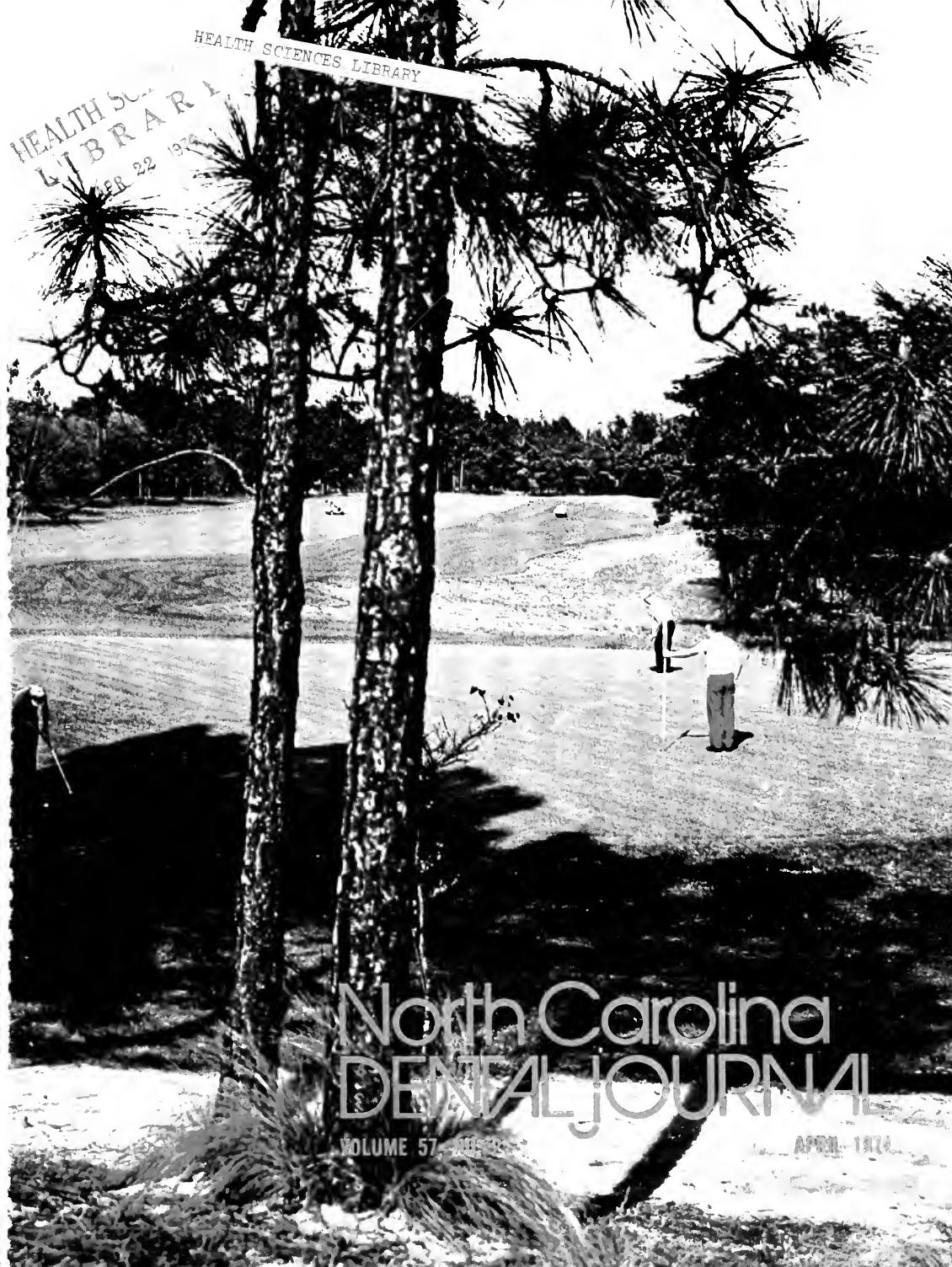
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ABOUT THE COVER

Pinehurst, North Carolina is the site of the annual May meeting of the North Carolina Dental Society. This general geographic area boasts of a large number of golf resorts. Many refer to it as the *Golf Capitol of the World*. It is just another example of North Carolina as *Variety Vacationland*. Photograph by Ed Carroll and furnished by the Travel Information Division, Department of Conservation and Development.

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EDITORIAL



Recreation and Continuing Education

The program of the Annual North Carolina Dental Society Meeting held in Pinehurst each year is about two years in preparation. The General Arrangements Chairman has numerous committees working at great length, throughout this period of time, to make the meeting a professionally enlightening as well as an enjoyable success. The program chairman has a tremendous responsibility consuming hours in time to assemble renown authorities to share their knowledge with the membership. These clinicians are carefully screened to assure their acceptability by the general membership and to satisfy their professional needs. Many of these are in such popular demand that they must be contacted a year or more in advance in order to assure their procurement.

All of this requires many hours including week-end meetings and at the time and expense of those individual dedicated committeemen.

Now, all work and no play makes for a dull meeting. However, it is a program of balance to achieve both objectives of work and play together with the personal and professional fellowship achieved through communications individually and collectively.

The labor, personal time away from home and individual expenses of dedicated Society officers and the willing and able committeemen is not as appreciated and recognized as it should be. Nor is this all that goes into the production of an annual meeting. The budget for such a meeting is astounding, and the commercial exhibitors must be recognized for their enormous contributions towards these objectives and many other worthwhile objectives served to the dental profession.

Yet, what do we do at Pinehurst each year? Yes, a few attend the scientific sessions, many patronize the commercial exhibits which they should for their company employees expend exhaustive hours displaying newer

products; many more attend the social occasions which are professionally stimulating, and a huge number patronize the recreational activities *with greater vigor and enthusiasm.*

What is the point? One of our main concerns heard from Murphy to Manteo is: We need continuing education! We need an organized program of continuing education! Your wishes are being given careful attention by the Council on Continuing Education under the guidance of chairman Dr. W. L. Hand, Jr. This Council has met frequently and expended much time, energy, and personal expenses in the organizational phase of this program. This program will become a reality as do all progressive ideas and programs by our dental society for the betterment of dental health in North Carolina.

Well, while you are yammering your heads off about continuing education, remember that a portion of continuing education is at Pinehurst May 12 through May 15. You have an outstanding program arranged, entitled "New Frontiers in Dentistry." Last year you were privileged to "Pulp and Periodontium in Pinehurst". So, how about less recreation this year, and some continuing education at Pinehurst, with thoughts towards "New Needles Among the Pines" next year.

After all, we are the North Carolina Dental Society and not the North Carolina Golfing and Tennis Society. Many go to the main hotel for registration only and are not seen again, I am told. This type of action could well kill the goose that laid the golden egg, which is already cooking.

The cover of this issue is meant to remind you of the beauty and enjoyment of the golf courses and the pleasure you have to utilize them. But let's put all things in their proper perspective, achieving balance. *See you on the golf course.*—RJS

GUEST EDITORIAL



CLIFTON O. DUMMETT, D.D.S.*

Dentistry, Detente Sociosensitivity

Dentistry is today well on its way toward being recognized as having an important part to play in achieving human health and happiness. Ideally defined, it is the specialized science of promoting and maintaining general health by preventing diseases and disabilities of the oral tissues, diagnosing their pathoses and abnormalities as early as possible, and treating them efficiently, comprehensively and with personal sensitivity whenever they occur.

Accomplishing these objectives is beset with difficulties and complexities, many of which have their origins in the very "nature" of the same human beings to whose health and happiness dentistry's functions are dedicated. In the United States over the past decade, substantive efforts have been expended to inculcate in dental clinicians the needed information and modified behaviors which will help them to reach these goals. This has been one of the primary tasks of community dentistry and public health, and instruction in these special areas is now mandatory in the curricula of the nation's dental schools.

Imbuing dental students with sociosensitivity is a serious business. Much of its implementation depends upon whether every dental pedagogue, regardless of specialty, appreciates the importance of community dentistry and relates to it in his or her ministrations to students. Professional traditions are what make appreciating and relating difficult. Inherited patterns of thought and action generally were limited to the concept that dentistry was exclusively concerned with the three Rs: restoration, removal and replacement of teeth. Important and basic as these procedures are, they tend, nevertheless, to justify the dentist's need for financial remuneration without completely accommodating his urge for professional fulfillment.

As yet, total success of many of community dentistry's laudable aims has not been realized because there are healthy intraprofessional differences of opinion about methods of implementation, as well as understandable, loyal, oppositions to philosophical changes. For example, it is generally admitted, at least in the United States, that the ineffective delivery of primary health care services represents one of the nation's more serious discrepancies. Despite this, there are those who maintain that technical proficiency in dentistry should remain the overriding concern of those who elect to affiliate with the dental profession.

It is a travesty for clinicians to be so obsessed with techniques and technical capabilities that they become indifferent to their accountabilities in the delivery of large quantities of high quality health care to all Americans, as well as to their responsibilities in carrying out dentistry's comprehensive functions as a health profession. Conversely, it would be equally injurious to the American people for dentists to be overwhelmed by social sensitivities and compromise the essentiality of a sufficient, well-intentioned, technical capacity buttressed by an understanding of its relatedness to oral biology.

It is revealing to witness dentists' anxieties and tensions which surface when in confrontations and discussions about health care delivery: polarizations occur and often extend beyond the bounds of reason and good taste. Resolution of existing differences thus becomes the destiny of an intraprofessional detente, and that is the ultimate resource for obtaining desired objectives.

The relaxation of strained relations and stresses among members of the dental profession is a primary requirement for immediate improvements in practitioner morale. This is a reasonable goal and it can be attained if general dentists' accomplishments are duly appreciated, if additional professional responsibilities are undertaken, and if scientific truths are permitted to re-

(Continued on page 23)

* Associate Dean, School of Dentistry, University of Southern California, Los Angeles

President-Elect, American Association of Dental Editors



James A. Harrell, D.D.S.

PRESIDENT'S REPORT

Our State Board of Dental Examiners

It is my basic intention in this message to the members of the North Carolina Dental Society to give our State Board of Dental Examiners an expression of appreciation. At the same time I feel that I must encourage everyone to study and consider new trends in education and the practice of dentistry in this state.

Health care delivery is becoming a very vital issue more and more each day in our state and our nation. Groups representing consumers are becoming more interested in health care delivery. We must become more concerned with the problem of satisfying the needs of the people of North Carolina, and not just the demands alone.

In working hard to preserve our private practice, we cannot afford to overlook the population explosion. In order to do this we must make programs for the indigent and third party programs more successful and creative.

The members of our State Board make a tremendous sacrifice in the amount of time and expertise they bring to this task. There could not be a more conscientious Board than our present one composed of Benjamin Baker, Tom Collins, Cecil Pless, Freeman Slaughter, Robert Sugg and Bob Watson. They are away from their dental practices and their families many days and weeks in the course of a year.

They spend several weeks examining dentists and hygienists for licensure to practice in this state. This is a difficult task because examinations, in addition to the national boards and clinical examinations, must be prepared and graded. Preliminary work must be done to examine the candidates in an orderly fashion in the clinic. It is a heavy responsibility and stress to decide who passes and who fails. They have numerous board meetings, as well as national and educational meetings, in connection with their duties. Our Board has an excellent reputation and relationship nationally.

All dental corporations must be approved and reviewed by the Board and registered each year with the Board. Many long hours are spent in hearings on these persons reported to be breaking some law. So many of us do not realize that one of their greatest tasks is enforcing the Dental Practice Act of North Carolina.

In recognizing the Board, let me include all the members in the past, who have honored the position with their sincere dedication in distinguished service. We have been very fortunate to have so many good and honorable dentists of such high caliber and good judgment through the years on our Boards. Some of our past members hold important positions today. Guy Willis is the Chairman of Council of National Board of Dental Examiners. Wade Breeland, Past President of the American Association of Dental Examiners, has been appointed to the American Dental Association's Council on Dental Education. Buck Barden is a member of the North Carolina Dental Society's Executive Committee and is Chairman of the Society's Dental Education Committee. We are all proud of our present Board, and all of the Board members who have served us in the past.

It is important that we strive to continue the appointment of high caliber individuals to this Board. In the very near future, we have matters of utmost importance facing the dental profession, the dental society, the dental school and the State Board of Dental Examiners. Together we must face the problems of health care delivery, as more people become eligible for treatment, either through third party programs, or government programs. Here again we must find better ways to care for the need and not just the demand. We must consider expanded duties for our auxiliary personnel. We need all the research data that we can obtain to enable us to decide to what degree we want to expand auxiliary duties in North Carolina. We must find ways of educating our present auxiliary personnel to new methods. We must explore ways of getting more education and experience to our dental students beyond the regular curriculum in the school by supporting and helping with the school extramural programs. As all of us become more dependent on the prosthetic laboratories, we must make a place for them under our umbrella, with our other dental auxiliaries, and set up requirements for educational standards. We as individual dentists can strive for good dental laboratory relations in individual dealings with dental technicians. Our lack of concern for the laboratory industry tends to invite den-

(Continued on page 23)

What Happens to Your Amalgam Restorations?

William D. Strickland, D.D.S.

A job well done! So often, the dentist has this feeling after completing amalgam restorations. However, every dentist has recognized that something happens to some restorations while others remain well-polished with intact margins, and look as if they were placed "just yesterday". Wolcott (1958) summarized that "too often satisfaction with amalgam work is short-lived". In the early hours or days after its placement there seems to be justifiable pride in a task well done. Then, peculiar things begin to happen, and gradually, but surely, the technical details of the restoration are altered—margins collapse, caries recur, discoloration develops, or it cracks and loses its footing." However, silver amalgam has saved and continues to save more teeth than any other restoration material. Moen and Poetsch (1970) reported that an estimated 159,000,000 amalgam restorations were placed in 1969. This amounts to tons of alloy not including the amount of mercury used in readying the alloy for insertion. It would be impossible to estimate the number of amalgam failures per year but on a daily basis restorations of amalgam are judged unacceptable and replaced.

It is unlikely that the manufacturers should shoulder the blame for any great number of amalgam failures. Alloys appearing on the list of certified dental materials should produce restorations with acceptable mechanical properties. An alloy should be chosen which provides the working properties suitable for the individual's technique. Today's alloys are far superior to those in the past and continued physical and clinical research should provide the profession with even better alloys in the future. The best alloy available won't in-

sure superior restorations because every step from cavity preparation to polishing effects the quality and longevity of the restoration. Some of the causes of amalgam failure will be discussed. Those discussed should not be considered as the only causes of failure but most can be attributed to one or more of those listed.

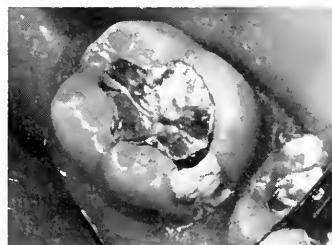


Fig. 1. Tooth fracture as a result of improper cavity preparation.

Improper Cavity Preparation. Faulty cavity preparation accounts for 56% (Healey, Phillips, 1949) of all amalgam failures. Cavity preparations which are too shallow, too narrow, insufficiently extended, or with poor retention form are doomed to failure. Perhaps the greatest single factor in poor cavity preparation is the disregard for proper resistance form. Restorations placed in cavity preparations which do not provide sufficient dentin support are more likely to fracture. In addition, tooth fracture is more probable when the fundamental principles of tooth preparation are not followed (Fig. 1). Attention to details during cavity preparation is very important but so often overlooked simply because tooth structure removal is so easy with high speed and carbide burs. It follows then that each step in cavity preparation should be executed as nearly perfect as possible so that the quality of

following steps is not jeopardized. A typical, conservative cavity preparation is shown in Figure 2. It is important to note that conservatism in cavity preparation preserves the strength of the tooth. Vale (1959) has shown that so long as the width (faciolingual) of the occlusal portion of the preparation does not exceed one-third the distance between the lingual and facial cusp points, the strength of the remaining tooth is not weakened from cavity preparation.



Fig. 2. Early detection, diagnosis, and conservative cavity preparation preserves the strength of the tooth.

Amalgam Manipulation. Of all amalgam failures, approximately 35-40 percent result from mishandling the material (Healey, Phillips, 1949). Manufacturer's instructions should be consulted for proper proportioning of the alloy and mercury, as well as trituration time. So often, the dentist is busy completing the matrix as the amalgam mix is prepared by the assistant. Should the chairside assistant be uninformed or improperly instructed in handling and mixing the material, the prepared alloy may be inferior. Even if every other step in the procedure is perfect, the resulting restoration may be a disappointment. Disposable capsules with pre-proportioned alloy and mercury are available commercially

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(Fig. 3). Their use should help eliminate the variable of proportioning and provide reasonably standard mixes.

It is important to choose an alloy-mercury ratio best suited for individual needs. A few facts to remember: (1) the greater the original mercury-alloy ratio, the greater the concentration of mercury in the final restoration, (2) there is a marked loss of strength when the mercury content exceeds 55 percent and there is an increased susceptibility to tarnish and corrosion, (3) undertrituration invites fracture and fraying at the margins, and (4) a mix which is too "dry" invites porosity and loss of strength.



Fig. 3. Commercially available, disposable capsules of preproportioned alloy and mercury.

Contamination. Many words have been spoken and written concerning the problem of keeping moisture out of the cavity preparation and the filling material; yet, some 16 percent of amalgam failures are attributed to moisture contamination (Phillips, 1958). One effect of contamination by moisture in the amalgam mix is expansion which usually begins several days after insertion and may continue for months. This is referred to as *delayed expansion* and should not be confused with expansion associated with too much mercury retention in the amalgam. Touching the mix with the hands introduces moisture into the prepared alloy. When the cavity preparation is not kept dry during condensation, saliva may be condensed into the restoration. Whatever the source, moisture weakens the amalgam and reduces desirable qualities, thus increasing the likelihood of failure. Moisture and zinc react to form hydrogen which may cause considerable internal pressure, acute pain, occasional blisters on the surface, and a decided loss of strength to the restoration (Phillips, 1958). Securing absolute dryness is accomplished by isolating the teeth with the rubber

dam, which provides the best opportunity for visibility as well as assurance of desirable properties in the restorative material. Quality certainly is a just reward for the few minutes it takes to apply the rubber dam.

Condensation. Improper condensation is another cause of amalgam failure. Some of the effects of poor condensation practices are: (1) porosity, (2) inadequate adaptation, (3) high residual mercury content, and (4) loss of strength. Lack of sufficient overpacking results in mercury-rich alloy at the cavity margin which leads to early marginal ditching. Proper insertion pressure and overpacking are essential in adaptation and removal of mercury from the amalgam, both of which should improve the restoration.

A single mix of amalgam should be condensed in 3-3½ minutes. When a large cavity preparation is to be filled it is best to make several small mixes rather than one large mix. The method of condensation is an individual choice but certain factors should be common to all: (1) start with small increments, (2) use condensers that are generally shaped to the area of the cavity preparation being filled, and (3) as mercury-rich alloy appears on the surface of the mass wipe it away with the condenser.

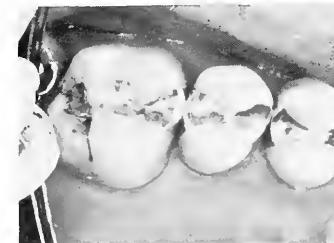


Fig. 4. Polished amalgams. Compare surface and margins to occlusal amalgam in molar.

Finishing and Polishing. Proper finishing and polishing of the restoration reduces the percentage of failure. Prior to polishing, the restoration should be surfaced (finished). This procedure (1) removes excesses beyond the cavity margin, (2) improves the occlusal anatomy, and (3) begins the polishing procedure. Surfacing the restoration is usually accomplished with round finishing burs selected in size to approximate the faciolingual width of the restoration. Using a reasonably slow

speed and light touch the restoration is smoothed while at the same time the desired occlusal anatomy is developed. Marginal excesses are usually removed during this step and the alloy-enamel outline should appear smooth. Polishing with a bristle brush and pumice followed by a rubber cup and tin oxide should produce a high polish to the restoration (Fig. 4).

Failure to remove marginal flakes and spur-like overhangs (which sooner or later will break away) results in ditching at the margin. Proper finishing of the restoration is one method of preventing this type of marginal failure.

Polishing improves esthetics, smooths the restoration, and reduces (minimizes) tarnishing. Also, polishing improves patient comfort, makes the restoration easier to keep clean, and prolongs the life of the restoration. Certainly, the time spent in polishing all amalgam restorations is justified when recall examinations reveal a restoration of superior quality (Fig. 5). More importantly, polishing reflects the careful, dedicated efforts of the dentist who extends himself beyond the accepted norm—a quality from which the patient benefits.

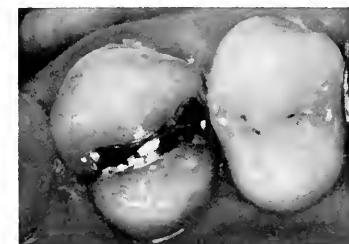
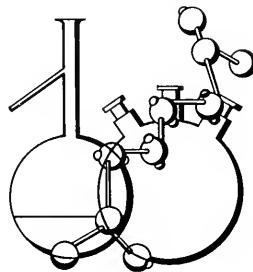


Fig. 5. Five year old amalgam restoration. Note polish and marginal integrity. Cavity outline was conservative.

Improper Diagnosis. Perhaps one of the most common problems associated with amalgam failure is when amalgam is used in situations where its physical and manipulative characteristics do not justify its use. The size of the cavity preparation in which amalgam is to be used certainly has its limits. When such things as remaining tooth structure, strength of the material, occlusion, contour, contact, cavity margin position and matrix design are considered, those teeth which should be restored with a cusp-capping inlay or full crown can be diagnosed.

(Continued on page 19)



inside dental research

The Neuroanatomy of Maxillofacial Pain

John M. Gregg, D.D.S., M.S., Ph.D.*

Pain, and the fear of pain, continue to be the main reasons why patients seek health care of all types. Paradoxically, pain also serves as a deterrent to a great segment of our population from seeking needed preventive and interceptive dental and medical care. Although pain remains largely a misunderstood phenomenon, within recent years neural scientists have made important contributions to the understanding of its basic mechanisms. In the following account a number of modern neuroanatomic and physiologic ideas about pain will be presented in an overall view of the mechanisms of maxillofacial pain.

One approach to understanding the experience known as pain is to describe its anatomical substrate. It is then possible to explain effects of pathology and to outline pain control therapies. First, however, it is necessary to define pain in terms of its primary behavioral component parts. Pain may be defined as an unpleasant human experience typified by four psycho-physiologic components: 1) *aversive* overt behavior, 2) *visceral* body responses, 3) discriminative perception of a potentially damaging stimulus, 4) *emotional* or suffering response. It is suggested that every pain experience contains varying measures of all four components although the predominance and importance of each component will vary greatly from one person to the next.

Examples of *aversive* somatic pain behavior include protective reflexes such as an instantaneous startle reaction, an immediate increase in total body skeletal muscle tone, turning of the head and throwing of the hands toward the pain stimulus, rapid eye movements, and vocalizations such as crying out.

Examples of *visceral* pain responses include immediate changes in vital body processes such as blood pressure, heart rate, respiratory rate and amplitude, altered smooth muscle and glandular secretion activity such as pupillary dilatation, salivation, peristaltic contractions, and changes in sphincter tone.

Pain *discrimination* or perception is an intellectual awareness of the nature of the pain stimulus; the process is rapid, localizes the point of stimulus in the body, and characterizes the pain as sharp, vibratory, hot, large, single or repetitive.

The *emotion* or affect component of pain is characterized by a vague unpleasantness which is slow in onset when compared to the detailed discriminative aspects of pain sensation. The emotional response builds in intensity and is largely influenced by previous experience, personality, culture and the context of the pain stimulus, i.e., how threatening the noxious stimulus is imagined to be by the individual.

Before the anatomic features of these pain components can be discussed, however, it is necessary to understand the nervous structure and functions that initiate the pain process.

When a physical stimulus or unit of energy (such as pressure, heat or light) is applied to body tissues, a number of types of nerve receptors are activated. Among these are chemical receptors which are especially sensitive to biogenic amines such as serotonin which may be released from injured tissues.¹

In a sense these chemoreceptors may be called "pain receptors." Once peripheral nerves have been activated by their many peripheral receptors, impulses are transmitted over individual fibers that vary greatly with respect to diameter, degree of myelination and speed of transmission (Figure 1). These variations in sensory fiber anatomy are important in the initiation of a pain response for two main reasons: first, it is believed that different kinds of fibers may carry "preferred" kinds of sensory information (for example, mechanical versus noxious stimulus information),² and secondly, because the relative balances of the impulses which enter the central nervous system from the different anatomic populations of nerves will greatly determine whether or not a pain response will be initiated.

For example, it is thought that the very large, heavily myelinated fibers, called the A alpha fibers, are activated by receptors that are mainly sensitive to non-noxious mechanical stimuli such as pressure and touch. Noxious stimulation is thought to be transmitted preferentially by two fiber types: the intermediate sized A delta and the small, poorly myelinated C fibers. There is considerable evidence to support the hypothesis

* Dental Research Center and Department of Oral Surgery, The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.

that the A delta and C fibers are in effect the "pain fibers."² (Figure 1).

However, activation of the A delta and C fibers does not assure that pain will occur, because important interactions between the input from various fiber groups must occur in the primary synaptic regions of the brain-stem and spinal cord. These CNS interactions depend on inhibitory and excitatory synaptic effects exerted by the differing populations of entering peripheral fibers; this interaction is the essence of the "gate control" theory of pain (Figures 2, 3). In this theory the large A alpha fibers enter the primary brain stem synaptic regions to activate interneurons which, in turn, inhibit the transmission of impulses arriving over the smaller A delta and C "pain fibers." In theory, the effects of small fiber transmission may also be influenced by fibers that descend from higher CNS centers such as the cortex (corticofugal) and the reticular formation. If the inhibitory effects of the largest afferent and the descending corticofugal type fibers predominate, then a pain response to the original stimulus will not occur. Instead sensations such as touch, pressure, heat or possible itch will be sensed. However, if activity in the smaller incoming fibers is strong enough, the small fiber effects will over-ride the inhibitory effects, the "gate" will be pushed open, and the CNS reflex activities known as pain will begin.

The concept of a brain stem or spinal cord "gate control" mechanism is useful in explaining many clinical pain phenomena. For example, when pathology has disturbed the balance of large versus small incoming fibers, abnormal pain responses might be anticipated. This is indeed the case in post-herpetic trigeminal neuralgia in which there is a destruction of the large fiber-smaller fiber balance due to a preferential infection of the largest trigeminal ganglion cells by the herpes virus. The resulting sensory changes consist of sharp, painful responses to even fine tactile stimulations.

The anatomic basis for the gate control pain effects in the maxillofacial region is as follows (Figure 3): The three branches of the trigeminal nerve enter the cranium in the middle cranial fossa and join in the ventral portions of the trigeminal ganglion where the varied size cell bodies are located but no synapses occur. The central fibers

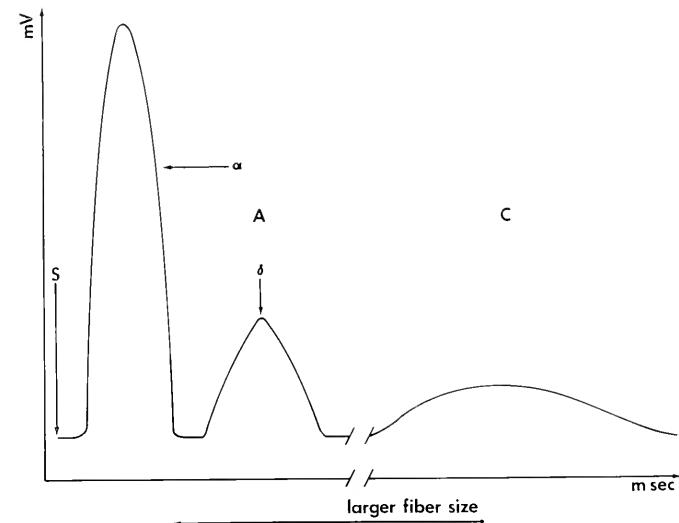


Figure 1. Fiber Spectrum of Sensory Nerve

Diagram of the major potentials recorded from a typical cutaneous nerve following electrical stimulation. S. Each wave results from the passage of impulses (action potentials) in many individual nerve fibers of the type indicated (A-alpha, A-delta, C).

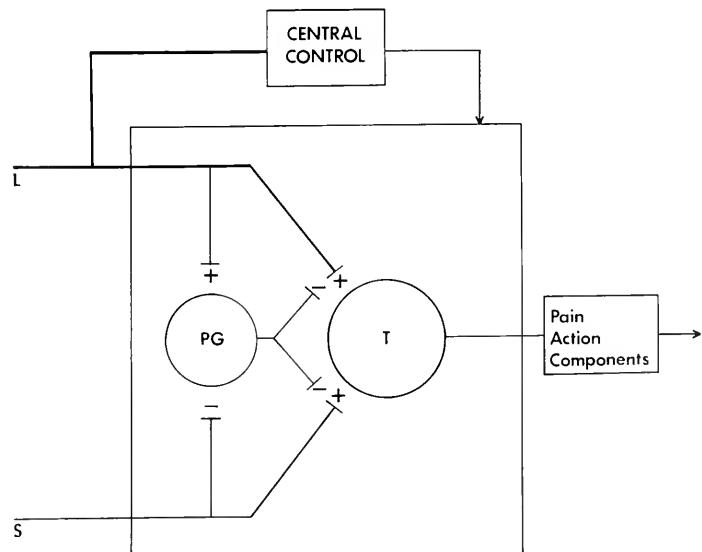


Figure 2. Gate Control Theory of Pain

(Adapted from R. Melzack and P. Wall, 1965, Science)³

Diagram of the gate control theory of pain, adapted especially for pain modulation in the maxillofacial region. L-large diameter afferent fibers; S-small diameter afferent fibers; PG-pars gelatinosa of nucleus of the descending tract of trigeminal; T-cells of nucleus of the descending tract of trigeminal which project to other brainstem and higher centers.

(Continued on page 12)

PAIN

(Continued from page 11)

of the pseudo-unipolar trigeminal cells continue in the sensory root and enter the pons where the fibers constitute the descending tract of trigeminal. Many of the largest A alpha fibers bifurcate and turn directly medially to terminate as synapses in the chief sensory nucleus. Projections from the chief sensory nucleus to the thalamus and cortex are known to be largely involved with the transmission of fine tactile functions and this projection may be important in the activation of the corticofugal phases of gate control modulation.⁴ The remainder of the fibers in the descending tract turn caudally and terminate medially by synapsing at all levels from mid pons to cervical 3 or 4 spinal cord levels.

It is in the most caudal portions of the trigeminal nuclear descending tract, in an interneuronal region called the pars gelatinosa, that the most important gate control interactions appear to take place. If reflex pathways that emanate from the nucleus of the descending tract of trigeminal are activated, then the pain "gate" is open and the psychophysiologic components of pain will begin.

Once it has been determined by peripheral and "gate control" nervous interactions that a pain response will occur, fiber projections from brainstem trigeminal nuclei will activate CNS reflex pathways to bring about the four basic psychophysiologic pain components.

The most basic pain activities are due to localized reflex arcs between the nuclei of the trigeminal descending tract and the somatic and visceral motor nuclei of the lower brainstem (Figure 4). For example, instantaneous aversive somatic pain responses are due to trigeminal projections to cranial nerve motor nuclei III, IV, V, VI, VII, IX, X, XI and XII. These reflexes are primitive, may involve one or at most a few synapses, and therefore are very rapid and tend to be protective in nature. An example of these localized pain reflexes is the corneal reflex, where a stimulus to the cornea activates fibers of the ophthalmic division of trigeminal which synapse in the nucleus of the descending tract. The secondary neurons project bilaterally to the motor nuclei of VII which brings about a forceful blink response of orbicularis oculi. Localized trigeminal pain

reflexes to brainstem para-sympathetic nuclei also account for some visceral responses including pupillary dilatation and altered salivatory activity. More complex forms of overt aversive and visceral pain behavior also are seen, but these are due to activation of more anterior brain stem reticular formation centers.

The discriminative-perceptive aspects of pain can be attributed to classical "lemniscal" pathways which may reach the somatosensory cortex via a two synapse pathway (Figure 4). This large fiber tract begins in the chief sensory and descending tract nuclei and ascends to the posteroventrolateral thalamus where synapse occurs before projecting directly to the somatosensory cortex (neocortex). Because impulses are transmitted rapidly through this system with little spreading or divergence, it is anatomically and physiologically suited for rapid and precise transmission of spatial and temporal pain information.⁵

The majority of aversive, emotional and visceral pain functions, however, are served by an entirely different anatomical system. Although many of the ascending lemniscal fibers of trigeminal go directly to the thalamus, it has been estimated that more than 70 percent of the secondary ascending trigeminal fibers turn off or branch medially into the reticular formation at many levels of the brainstem.⁵ Activation of the reticular formation in the medulla oblongata and pons brings about changes in the functions of vital centers located there. Notable changes take place in the cardio-regulatory and the respiratory centers to produce such effects as breath holding, tachycardia and elevated blood pressure (Figure 4).

At higher levels of the reticular formation, specifically in the midbrain core, the medial thalamus and hypothalamus, pain activation results in widespread aversive behavior and massive discharges of both autonomic and endocrine functions. Examples of these effects include rage behavior, shivering, micturition, sweating, panting, cutaneous vascular changes (paleness or flushing) and arrector pili contractions ("goose pimples").

The "motor" centers of this widespread visceral-aversive pain behavior are the autonomic centers located in the hypothalamus and also the directly related pituitary gland. Examples of pituitary pain effects would include

thyroid and adrenal cortical secretions of stress-related hormones. Chronic activation of both CNS autonomic center and the endocrine "stress" responses as part of the pain-anxiety experience may have widespread implications in the pathogenesis of secondary metabolic disorders.

A final significance of the activation of anterior brainstem reticular formation in the pain process is its relationship to emotion. The primary projections from the paramedian midbrain, medial thalamus and hypothalamus are those to ventral portions of the paleocortex known collectively as the limbic lobes. The limbic cortex has long been thought to be the region in which humans "experience" emotion. It is a complex region interposed between the neo-cortex and the hypothalamus-reticular formation complex. For this reason the limbic region is well suited to integrate intellectual pain functions such as memory and discriminative perceptions, and at the same time initiate or amplify autonomic and even endocrine system activities in the hypothalamus. In terms of the pain experience this region is probably responsible for the suffering aspect of pain, and it is this aspect that may be most affected by potent analgesic agents such as heroin or morphine. These drugs tend to diminish the suffering of pain while still preserving a certain intellectual awareness of the persisting noxious stimulus. It is also likely that chronic activation of the limbic-hypothalamic axis either from psychic tensions or from chronic pain may be the anatomic basis for many of the so-called psychosomatic disorders such as gastrointestinal stress ulcers and oral mucosal pain with xerostomia.

In summary, the discriminative-perceptive component of pain is mediated by a rapid acting trigeminal-thalamic-neocortical pathway. All of the other pain components are due to either localized primitive brainstem motor arcs or to massive activation of the reticular formation centers at many brainstem levels. The aversive pain responses are attributed to both localized trigeminal-cranial nerve motor reflex arcs as well as more massive behavior initiated by the midbrain and medial thalamic reticular centers. Visceral pain activity is due to both localized trigeminal para-sympathetic loops, vital center activation from reticular formation collaterals, and widespread stimulation of au-

tonomic and endocrine functions through anterior reticular-hypothalamic activation. Finally, pain suffering and emotion is probably due to reticular-hypothalamic activation of the paleocortical "limbic" lobes.

Current Pain Research at the University of North Carolina

A number of clinical research projects are now being conducted by scientists at the University of North Carolina Schools of Dentistry and Medicine in an effort to test some of the modern theories of pain mechanisms and pain control techniques proposed in the above model. Two basic lines of research are being pursued within a specially prepared clinical research unit at the Dental Research Center. First, the neuropharmacologic control of "iatrogenic" pain, and secondly, the pathogenesis of chronic neurologic pain disorders. In the first of these studies the effects of amnesic and hallucinogenic drugs on the pain and anxiety experiences during oral surgery are being studied in a controlled clinical environment. The amnesic properties of diazepam (Valium) have been studied with respect to its rather strong potential to interfere with a memory of pain events. It has been learned for example, that nearly 100 percent amnesia can be induced for brief periods of time with surprisingly small intravenous doses (5-7 ml) and that greater than 75 percent amnesia effects may persist for periods of time longer than 30 minutes after higher intravenous doses (greater than 18 ml) of diazepam have been given.

Another potential pain control medication under intensive study at the University of North Carolina is delta⁹-tetrahydrocannabinol, an active ingredient of marijuana which has recently been prepared for intravenous injection. In a series of forty clinical trials patients undergoing third molar surgery have been premedicated with the delta⁹-THC, and both physiologic and psychologic effects have been measured.

Preliminary results have revealed a wide range of physiologic changes being brought about by the marijuana derivative which may have therapeutic value or implications. For example, the drug appears to stabilize and accelerate cardiac conduction systems, it greatly inhibits parotid salivary flow and reduces intraocular pressures to less than

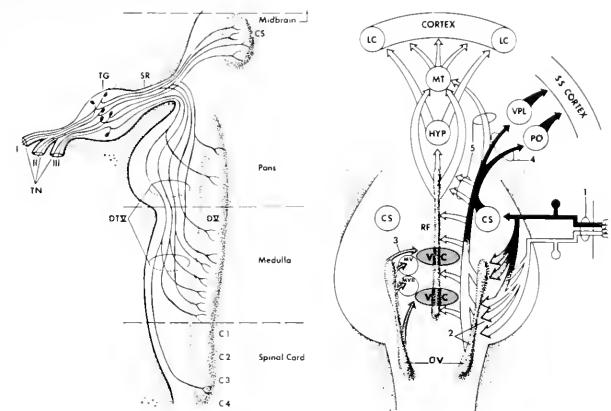


Fig. 3

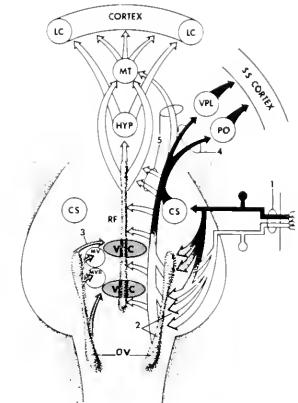


Fig. 4

TN-trigeminal nerves; TG-trigeminal ganglion; SR-sensory root; CS-chief sensory nucleus; DTX-descending tract of trigeminal; DV-nucleus of descending tract of trigeminal.

Figure 4. Central Neuroanatomic Pain Pathways

(Adapted from Casey, K., 1973, Amer. Sci.)⁷

Diagram of neural pathways important to maxillofacial pain components. RF-reticular formation; DV-nucleus of descending tract of trigeminal; MV-motor nucleus of trigeminal; MVII-motor nucleus of facial nerve; CS-chief sensory nucleus of trigeminal; VC-vital centers for cardiovascular and respiratory functions; SS-somatosensory cortex; MT-medial and intralaminar thalamus; HYP-hypothalamus; LC-medial forebrain "limbic" cortex; VPL-ventroposterolateral thalamus; PO-posterolateral thalamus. 1) peripheral afferent nerves composed of large and small diameter fibers. 2) site of proposed "gate control" interaction which influences secondary ascending trigeminal systems. 3) local brainstem pain reflex arcs from trigeminal nuclei to cranial nerve motor nuclei. 4) discriminative pain perception system from larger fiber trigeminal sources to somatosensory cortex. 5) trigeminal projections to paramedial reticular formation initiating complex pain aversion responses, autonomic and endocrine "visceral" pain responses and pain emotions of suffering.

40 percent of normal. Of greater interest perhaps, have been the psychic effects that have been observed when THC has been given intravenously. In the current setting and under the stress of oral surgery conditions, there has been an alarming tendency for patients to undergo panic reactions and in a few notable instances appear to undergo a mild paranoid psychotic-like episode. Findings of this study may lead to the establishment of guidelines for the management of patients who have been exposed to hallucinogenic drugs.

A second major phase of clinical pain research has focused on the chronic neurologic maxillofacial disorders. In one study, patients who have sustained trauma to the peripheral trigeminal nerves during facial fracture or elective surgery have been studied in detail with advanced neurologic and psychologic testing methods in order to clarify some of the important factors in post-traumatic pain such as paresthesias, phantom phenomena, and "burning" tissues states.

Finally, a number of chronic pain therapy investigations are being carried out in the multidisciplinary UNC Pain Clinic being conducted at the Dental Research Center every week. Examples of investigations taking place within the Pain Clinic include a therapeutic study of the interrelations between psychologic depression states and pain behavior related to the musculo-skeletal system. Pain patient responses to balanced techniques of behavior modification (operant conditioning, relaxation therapy, and mood elevating drugs) are being measured. Other pain therapy investigations have been concentrating upon physiologic techniques for the control of pain such as the transcutaneous electrical stimulation of trigeminal nerve branches. This latest approach, based strongly on the theoretic implications of the gate control theory of pain, has been given promising results in a limited number of pain patients.

Because of the new insights into the inter-relationships between the mind

(Continued on page 38)

History of North Carolina Dental Auxiliary



North Carolina Dental Auxiliary insignia was designed by Mrs. Kimball Griffin of Durham, N. C.

The wives of the North Carolina dentists had accompanied their husbands for years as guests when they assembled for their annual convention. In 1950, the ladies realized the need to establish their own organization in order to further promote the interests of the dental profession. These ladies met in the Pine Room of the Carolina Hotel in Pinehurst, North Carolina, May 19, 1950, for the purpose of organizing the State Dental Auxiliary. The meeting was called to order by Mrs. M. H. Truluck, of Asheville, who served as temporary Chairman and Dr. Walter McFall of Asheville, was recognized as President of the North Carolina Dental Society.

Motion was made by Mrs. Henry Lineberger, of Raleigh,

that the following nominees for State President be presented:

Mrs. John A. McClung, Winston-Salem

Mrs. Darden J. Eure, Morehead City

Mrs. W. T. Martin, Raleigh

The following officers were elected:

Mrs. McClung, First President of the North Carolina Dental Auxiliary

Mrs. Darden J. Eure, President-Elect

Mrs. C. M. Parks, Secretary

Mrs. Grady Ross, Treasurer

Mrs. Henry C. Carr, Historian

The dues were established at \$2 per year—\$1 for Districts dues and \$1 for State dues.

The ladies then divided into groups, organized the Districts, and elected the following Presidents:

First District—Mrs. C. B. Taylor, Hendersonville

Second District—Mrs. George Alexander, Kannapolis

Third District—Mrs. T. E. Sikes, Greensboro

Fourth District—Mrs. Royster Chamblee, Raleigh

Fifth District—Mrs. Fred Hunt, Rocky Mount

The first official meeting was held May 1, 1951, in the Card Room of the Carolina Hotel in Pinehurst. It was at this meeting that the Auxiliary accepted the responsibility for collecting Scrap Amalgam to be donated for the State Dental Relief Fund.



first district news

Hicks Hamrick, Jr., D.D.S., Editor

Dr. Richard P. Belton of Gastonia was recently named by Governor James Holshouser to the State Commission for Health Services. One of five new members appointed, Dr. Belton will serve a four year term on the eleven-member state health board.

Dr. Belton is married to the former Helen Averette of Elizabethtown, North Carolina, and they have three children Rick 6, Kelly 5, and Cheri 2. After graduation from the University of North Carolina, School of Dentistry in 1965, Dr. Belton served Guilford County Health Department in Greensboro as a public health dentist. He established his practice in

Gastonia in 1966. Dr. Belton's civic activities include membership in the Optimist Club of Gastonia and a member of the board of directors of the Gaston County chapter of the American Cancer Society as vice-president. He is active in the First Presbyterian Church of Gastonia as a Sunday School Class President and a member of the board of deacons.

Professionally, Dr. Belton now serves the North Carolina Dental Society as a member of the House of Delegates. He is Vice-president of the First District Dental Society and President of the Catawba Study Club. He has held several offices in the Gaston County Dental Society including President.



third district news

Jon W. Couch, D.D.S., Editor

The Third District is pleased to have Dr. Galen W. Quinn as its president for 1974. Dr. Quinn is currently Chief of the Division of Orthodontics, School of Medicine, Duke University Medical Center, a position he has held since 1958.

Dr. Quinn is a native of South Dakota and was graduated from Creighton University School of Dentistry, and received a Master of Science degree in orthodontics from the University of Tennessee College of Dentistry in 1955. Dr. Quinn joined the faculty of the Duke University Medical Center as Chief of Orthodontics in 1958. Dr. Quinn has worked closely with the Division of Plastic Surgery to develop a team approach to dentofacial anomaly treatment. A new philosophy of treating facial anomalies, especially cleft lip and cleft palate, as early in life as possible has evolved from this group of researchers. This philosophy has been fostered not only at the Duke Medical Center, but has influenced similar thinking elsewhere.

Development of broad research interests and expansion of new techniques necessarily required special equipment. Dr. Quinn was primarily responsible for the design and construction of a functional rotational cineradiographic unit in 1963. This unit, the first of its kind and one of two in existence, takes serial radiographs of a functioning anatomical part. Developed exclusively for the study of temporomandibular joint movement, the machine's usefulness has been demonstrated in swallowing studies, air flow studies, speech dysfunctions, and many other problem areas. It is expected that disciplines other than dentistry will eventually be influenced by this work.

In working with facial anomalies, acquired and congenital, Dr. Quinn frequently found limitations in duplicating the articular movements of his patients with the commercial articulators available. In 1964 the first working model of a special articulator was produced that could reproduce accurately, virtually any conceivable temporomandibular movement. The machine is now proven and orthodontists throughout the profession have acknowledged its usefulness.

Dr. Quinn was able to acquire one of the first twelve panoramic x-ray machines ever produced. Obtained with research funds, the machine was installed at Duke over a decade ago and has been continuously refined since that time.



Care for Oral Facial Handicapped

Dr. Quinn was Dean of the School of Dentistry at Creighton University in 1961-1962 and chief of the Division of Orthodontics at Duke at the same time. Research interests and his dedication to handicapped children influenced him to forego the academic and administrative pathway. Dr. Quinn has lectured extensively on growth and development, restorative dentistry, anesthesia techniques, utilization of auxiliary personnel, treatment of early dentition problems, cleft lip and palate, treatment of various facial anomaly conditions including treatment of prognathism and hypoplasias, treatment of temporomandibular problems, occlusion diagnosis and in-patient dental service. Publication of over 30 articles in journals and periodicals attest to a wide variety of experiences and study.

In addition to the broad range of professional responsibilities, Galen Quinn has also shared himself with church and civic organizations. The list is extensive and impressive. Mrs. Quinn, the former Virginia M. Felty, and their eight children also get a sizeable share of his love and attention.

The Division of Orthodontics at Duke Medical Center is an interesting and exciting place. Visitors are welcome and will be overwhelmed at the various disciplines available for patient care. Only a man with the energies and capabilities of Dr. Galen Quinn could maintain and further its objectives. The Third District Dental Society is fortunate to have Dr. Quinn as our District President.



fourth district news

Vonnie B. Smith, D.D.S., Editor

The twenty-first annual District Officers Conference (DOC) was held in Raleigh on Saturday, December 8, the day following Dental Seminar Day in Chapel Hill. Dr. Joseph Johnson, immediate past president, presided.

The day began with an invocation by Dr. Frederick G. Hasty. Dr. Johnson then welcomed the attending fifty-five conferees and thanked them for attending in bad weather and a local gasoline shortage.

President of the North Carolina Dental Society, Dr. James A. Harrell gave a report on the state society. Dr. Harrell's report included many facets of the current operation of our society, including Preventive Dentistry, the Continuing Education Council of North Carolina, the program for our 1974 Annual Session, possible changes in the *Constitution and Bylaws*, society election customs, laboratory registration, the Dental Forum, and his personal feelings about moving the House of Delegates meeting back to the annual session. Since the primary purpose of this conference is training, Dr. Harrell mentioned certain issues he wished to have discussed in the various sessions.

A report from the Industrial Commission by Dr. D. W. Siefert followed Dr. Harrell's report. Principally, Dr. Siefert stressed the need for complete understanding between the Commission and any practitioners prior to proceeding with extensive care. The Commission wishes to maintain good relations with the society members and communications is the key.

At mid-morning the assembly broke and moved into group discussions. Each group had as its leader a representative of the state society. Work continued in the individual areas until lunch.

The afternoon session was for general dissemination of information. Each group was expected to report back to the conference its problems, their solutions and recommendations for conference action.

A report of a meeting with the specialty groups concerning peer review was given by Dr. James H. Lee, Chairman of the Peer Review Committee.

Dr. James A. Harrell, moderator of the presidents group reported the group had voted to accept the DOC Manual as it is written and indicated that his group had discussed new member attendance at district meetings. Later in the conference, Dr. Kenneth D. Owen, Secretary-Treasurer of the Second District submitted the following resolution which was duly seconded and passed:

Resolved, that every member of the N. C. Dental Society in order to maintain his membership be required to attend separate orientation and charge sessions at the next annual meeting of his district dental society following his election to membership (service time excluded) and be further

Resolved, that failure to comply with the above requirement result in a review of membership status of said new member by the Executive Committee of said new member's district dental society and be it further

Resolved that in order to implement the above requirement the following be done immediately: a statement be placed on all future applications for membership in the N. C. Dental Society to read as follows: I understand that should I be elected to membership in my local district dental society and the N. C. Dental Society, my continuing membership is subject to my attendance at separate orientation and charge sessions at the next annual session of my district dental society and be it further

Resolved that the Executive Committee of the N. C. Dental Society in conjunction with the N. C. Dental Society standing committees on Membership and Constitution and Bylaws immediately seek means to enforce the above requirements on membership and present its proposal to the next meeting of the N. C. Dental Society House of Delegates.

Dr. Gerald Cathey, moderator for the Vice-Presidents, gave a report on efforts to get non-members into the society.

Dr. Charles W. Horton, moderator for the Presidents-Elect, gave a report on tentative dates and sites for 1975 district meetings:

1st District—September 26, 27, 28,—Asheville or Blowing Rock

2nd District—September 20, 21, 22,—Downtowner, Charlotte

3rd District—October 4, 5, 6—Four Seasons, Greensboro

4th District—October 10, 11—Royal Villa, Raleigh

5th District—September 11, 12, 13—Wilmington

The moderator for the State Committee Chairman, Dr. Joseph Johnson, reported for his group and made six recommendations:

1) The state committees should be appointed and notified prior to the Annual Session in Pinehurst.

2) The Chairmen of each committee should be asked to meet with his committee at Pinehurst.

3) The President-Elect should direct the committees as to their goals at the time of their appointment.

4) The chairman should be responsible for seeing that all committee members are active in their duties.

5) The district delegation to the NCDS House of Delegates should have a called caucus one week prior to the meeting of the House of Delegates and invite members from their district that serve on committees that have reports in the Blue Book.

6) One issue of the Newsletter should be given to the President-Elect to announce his committee appointments and to outline his specific instructions to the committee.

District Editor group moderator, Dr. R. J. Shankle, recom-

mended that district editor appointments last from 1 January to 31 December. This will permit the district editor to report to the state editor, on time, the proceedings of each district meeting.

Moderator of the training sessions for delegates, Dr. Ralph D. Coffey, very eloquently presented the following recommendations from his group:

1) The names of the reference committees in the NCDS House of Delegates are to be changed.

2) Important issues of the Dental Society should be published in the *Newsletter* prior to the NCDS House of Delegates Meeting.

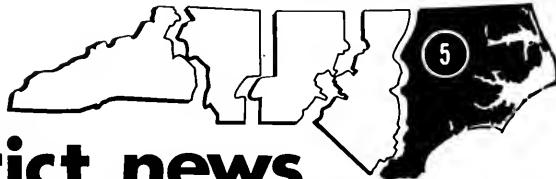
3) The Blue Book should be mailed 30 days prior to the NCDS House of Delegates Meeting.

4) The Central Office should mail to the District Presidents prior to the Annual District Meeting issues facing the next NCDS House of Delegates.

5) Delegates should attend the meetings of the Dental Forum.

The 1974 DOC will have as its officers the following: Dr. James A. Harrell, President, Dr. William A. Current, Vice-President, and Robert L. Cherry, Secretary.

The conference adjourned at 4:15 P.M.



fifth district news

Wayne C. Anderson, D.D.S., Editor

District continues emphasis on continuing education courses.

More than fifty members of the district were presented certificates last September for participation in recognized continuing education courses. This was quite an outstanding accomplishment, because each recipient had to complete hours that were two times those required by the Academy of General Dentistry in any one year.

Dr. David Freshwater, District President, appointed Dr. Richard Hines, Jr. of Edenton, Chairman of Continuing Education for this year. Dr. Hines and his committee started early to plan something new for the District membership. On February 6, 1974, a one day seminar was held in Williamston, North Carolina. General S. N. Bhaskar, Director, United States Army Institute of Dental Research, presented a program on *New Clinical Concepts in General Practice*. Over 250 dentists and auxiliaries were in attendance for this outstanding program. The Continuing Education Committee plans to try to present two seminars of this type in different areas of the district each year.

The Onslow County Dental Society hosted a two day Dental Seminar in Jacksonville on Friday and Saturday, February 21-22. Dr. James W. Cosper from the Pankey Institute in Miami, Florida, presented a program on *Occlusion*. More than 200 dentists and auxiliaries registered for the meeting.



Seminar by Bhaskar in Williamston

Study of Dental Manpower being utilized by the public

The Executive Committee of the District has asked that a comprehensive six-month survey be conducted to determine the projected manpower needs of the Fifth District. The study is to run from February 15, 1974, to August 15, 1974. Each dentist is to record:

- a) the number of hours in the office available to treat patients
- b) the number of hours actually treating patients.

Statewide Kick-off of Preventive Dentistry Program

James A. Harrell, D.D.S.

Chairman Mason, Superintendent Melton, girls and boys, distinguished guests, ladies and gentlemen. This is a very happy occasion for me and for all of the dentists in North Carolina. To be able to take part in this statewide kick-off for the new preventive dental program is a great thrill. It is very appropriate that we start this new program on the first day of Children's Dental Health Week and that we start it in the extreme Eastern part of our State. There are a large number of dentists in this part of the state that are very active and are leaders in preventive dentistry programs.

Sometimes people cannot believe that dentists could be so conscientious as to sincerely search out ways to reduce their own business interests. However, as most of you know, members of the health services are constantly striving to eliminate all diseases.

The prevalence of dental disease in our population exists as the most staggering public health problem confronting North Carolina at this time. While it does not have as dramatic an impact as some of the more lethal diseases such as cancer and heart disease, dental disease extracts a heavy price from our society in terms of ill health, suffering, and loss of productivity.

The North Carolina Dental Society, realizing this problem, employed Dr. Frank Law, a well-known dental public health consultant of Bethesda, Maryland, to perform a study of the dental health problems in North Carolina and to propose solutions to these problems.

Here are some of the highlights in the staggering dimensions of the dental health situation as found by Dr. Law in North Carolina:

—12 million unfilled, decayed, permanent teeth in this state's population.

—150 thousand decayed, unfilled, permanent teeth among ten year olds.

—670 thousand people have lost all their teeth and over 3,000 of these are between 15 and 19 years of age.

A large sum of money has been spent annually by North Carolinians for essential dental services, but two-thirds of the population receives no dental care. North Carolina has one dentist for every 3,100 people—The national average is one per 2,100. Some areas of North Carolina have no practicing dentists.

Dr. Law stated that the most attractive, economical, and beneficial solution exists in a massive program of pre-

vention. This program is designed, by 1984, to reduce dental disease by 25 percent in the North Carolina population 20 years and younger, and 40 percent in the population 10 years and younger and, would eventually bring about a significant reduction of dental diseases in the entire population of the state.

As you know, the General Assembly appropriated \$261,392.00 to implement this first year of the ten year plan proposed by the North Carolina Dental Society. This was a real example of what can be accomplished with everyone working together. The Dental Society, the Dental School, the Dental



On February 4, 1974 the statewide kickoff for the public school Preventive Dentistry Program was held at Winstead Elementary School in Wilson, North Carolina. Shown above is Mrs. Jeannette Jones, Wilson County Dental Hygienist, working with a 6th grade student on plaque control techniques. Looking on are Dr. Jerome Melton, left, Asst. Superintendent of Public Instruction and Dr. James A. Harrell, right, President of the North Carolina Dental Society.

Foundation, the Department of Human Resources, the Department of Public Instruction, the North Carolina Dental Hygienists Association, the North Carolina Dental Assistants Association and many other groups and individuals exerted all their efforts to establish this plan. Objectives of this plan are:

1. The benefits of fluoride therapy to be extended to all school age children in North Carolina by three basic mechanisms:

a. Matching grant funds to encourage fluoridation of public water supplies.

b. Funds for continuing installation of school water fluoridators in rural areas.

c. Regular, supplemental fluorides for school children without access to fluoridated water.

2. Pre-service and in-service training of teachers in preventive dental health education methods in order that they may augment training of North Carolina school children in prevention.

3. Continuing education in prevention for dentists and dental auxiliaries.

4. Preventive dental health through the media.

5. Research and evaluation of all preventive programs to assure that all financial and manpower investments are soundly made and produce the desired results.

After the proposal of the study came the question, does North Carolina have the resources to stage a massive preventive program? Yes was the answer because of four major sources.

1. We have the oldest State Dental Society in the United States with a recognized interest in prevention.

2. We have the oldest State Dental Public Health Program in the nation and is recognized as the leading Dental Health Program in the United States.

3. The University of North Carolina School of Dentistry which was just recently recognized as the number one Dental School in the United States.

4. The many Community Colleges that have been established throughout the state.

Portions of all these objectives are currently being implemented through the program of the Dental Health Section, North Carolina Dental Division of Health Services, Department of Human Resources, and these are being carried out to the greatest extent possible in terms of manpower and money available.

In order to expedite certain education and preventive aspects of the program, a steering committee was appointed by Superintendent Jerome Melton. The committee is currently developing materials and guidelines to be used in the educational components for teachers in public schools. This committee also implemented the phase of the program dealing with plaque control.

So today, local dentists will demonstrate correct flossing and brushing techniques and assist teachers in recognizing dental problems in nine school units. This is the first step in a joint effort to offer preventive dentistry to every fourth and fifth grader in the State of North Carolina. It is planned that kindergarten children through the third grade will get fluoride treatments.

This is the first state in our nation to undertake a statewide, well planned and comprehensive program to control dental disease. It would be a major mistake and a waste of money to start this program and not complete it. I am calling on everyone, the dentists, the superintendents, the principals, teachers and our government, to endeavor to make the program work and to get it funded again next year.

In closing, I must give credit to many groups and individuals for making this great program possible. Two people in this group deserve our greatest praise: Dr. James W. Bawden, Dean, University of North Carolina School of Dentistry, who had the foresight to see the dental need of the people of North Carolina and recommended and encouraged the Dental Society to employ Dr. Frank Law for a study of the needs.

The other, Assistant State School Superintendent Jerome Melton, who already believed in plaque control programs and other preventive dental programs for our children. His untiring efforts to get this program funded and then to get it implemented deserves our greatest thanks. Then, the entire staff of the Dental Health Section of the North Carolina Division of Health Services, Department of Human Resources, deserves our gratitude. They had the best program going in the United States and they have expanded as quickly as possible with this new endeavor. Without this great resource with which to begin we could not have progressed.

YOUR AMALGAM

(Continued from page 9)

However, financial factors often preclude this more expensive treatment and amalgam is used to "save" the tooth for the patient. Too often however, this type of restoration results in poor contact, inadequate contours, overhangs, tooth fracture, and early failure (Fig. 6). One of the advantages



Fig. 6. Amalgam failures due to improper diagnosis and treatment. Molars should have been restored with a cusp-capping inlay.

of regular, periodic dental examinations is early detection, diagnosis, and treatment of caries. Early treatment allows conservative cavity preparations with resultant small restorations; this results in less cost to the patient for dental care. More importantly, the patient (and the dentist) can expect years of service from these restorations.

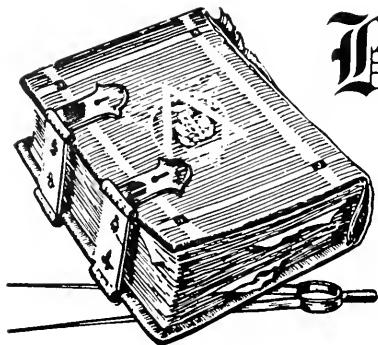
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Book Reviews

Clinical Drug Therapy in Dental Practice, by Thomas J. Pallasch, D.D.S., M.S., Lea and Febiger, Philadelphia, 1973.

This compact, 279 page book is devoted to drug control of pain, anxiety and infection in dental practice and to general principles of pharmacology with emphasis on toxicology and drug interactions. The book is intended to be an immediate reference source for indications, dosages, contraindications and side effects of drugs in the three categories most used by dental practitioners. The information about each drug, or group of drugs, is relevant, up-to-date and easy to find under clearly marked subheadings in one of the three main chapters in the book. The same information is found in summary form in the Drug Listings at the end of the book together with suggested dosages and, in some cases, time of onset and duration of action. The chapters and sections on general principles of drug therapy and toxicology are perhaps even more valuable than the specific drug information. A brief overview of principles of drug absorption, distribution, biotransformation, and elimination and mechanism of action is found in the first chapter followed by a review of prescription writing and current drug regulations. Each of the chapters devoted to analgesics, antianxiety agents or antiinfective agents contains sections on general principles pertinent to that drug category, such as "General Concepts of Pain" and "Analgesic Combinations"; "Oral Microbial Pathogens," "Indications for Antibiotic Usage," "Antibiotic Combinations," "Prophylactic Use of Antibiotics" and "Antimicrobial Sensitivity Testing."

The toxicology chapter of the book contains a number of topics of great importance to any prescriber of drugs. The section of "Perinatal Pharmacology and Teratology" is particularly valuable and thought-provoking. Two other sections that are particularly pertinent are "Prevention and Treatment of Drug Reactions" and "Drug-Drug Interactions." The latter section contains a most useful four-page table of "Medical-dental Drug Interactions" that contains proprietary, as well as, generic names, (to allow quick identification of a drug prescribed for the dental patient by a physician), mechanism of interaction, possible clinical effect and clinical significance of the effect.

In general, "Clinical Drug Therapy in Dental Practice" is a well written book, it contains sound principles of pharmacotherapeutics and it is amply referenced and indexed. Be-

cause description of many drug categories was purposely eliminated, the book does not take the place of a general textbook of pharmacology or ADA Accepted Dental Therapeutics, but it should serve as a valuable and refreshing addition to the practitioner's office library.

SVEIN U. TOVERUD, D.M.D.

Complete Dental Assistant's Secretary's, and Hygienist's Handbook, Charles A. Reap, Parker Publishing Company, Inc., West Nyack, New York, 1973, 240 pages.

The stated purpose of the text is to help the dental auxiliary become better qualified and trained in order to enable them to become a stronger member of the dental team and to help the dentist learn to use the dental auxiliaries' skills and knowledge to a better degree. Further, it is stated that the text is directed to the dental assistant who has already learned and developed some basic skills in the field.

The major sections in the text are directed toward suggestions for the secretarial assistant; the chairside assistant; and the dental hygienist. In addition, there are suggestions for administration of the dental office.

Chapters in the text dealing with effective appointment book control, and the recall system and how to use it are interesting and informative. Other chapters are concerned with topics on: points for success in the dental office, telephone tips, supply control, monthly billing and collections, controlling accounts, the case presentation, patient control, the four-handed technique, equipment care, effective office manuals, and time and work saving tips.

The title *Complete Dental Assistant's, Secretary's, and Hygienist's Handbook* is somewhat misleading. Although the text deals with common problems that may occur in the dental office, it is, in this reviewer's opinion, not complete. The text is best directed toward a member of the dental team who is new to the field. It may assist in orientation of office personnel to problems that may occur in the dental office and how to solve them.

Illustrations and photographs in the text include examples of appointment book and work schedule sheets, case plans, and typical instrument tray set-ups.

MARY GEORGE, C.D.A., R.D.H.

Items of Interest



Executive Secretary Weds. Miss William Terry Williams became the bride of Robert L. Cherry recently in a Rockingham setting.

The bride is the daughter of Mr. and Mrs. J. E. Williams. The bridegroom's parents are Mr. and Mrs. R. L. Cherry of Norfolk, Virginia.

Following a wedding trip to Pennsylvania, they have made their home in Raleigh.

Mr. and Mrs. Cherry were graduated from the University of North Carolina at Chapel Hill. Following the receipt of his Master's Degree in business administration in May 1973, he has served as executive secretary of the North Carolina Dental Society.

The American Association for the Advancement of Tension Control. The first meeting of the American Association for the Advancement of Tension Control will be held in Chicago, Illinois, on October 12, 1974. The Association includes the following six divisions: Dentistry, Education, Medicine, Physical Therapy, Psychology, and Members at Large.

For information about membership

and the meeting write the Executive Office, P. O. Box 7512, Roanoke, Virginia 24019, Attention Dentistry Division.

International Affairs. Kathleen Ellegood Morr, of Chapel Hill, has been named chairman of the Committee on International Affairs of the American Dental Hygienist Association.

Academy of General Dentistry. The President of the Academy of General Dentistry has expressed serious concern that the Academy's acceptance of continuing education programs is being considered as endorsement of a speaker or a treatment technique. The Academy does not accept for credit any individual speaker or dental technique.

Fellowship in the Academy is earned by maintaining five years of continuous AGD membership and completion of 500 hours of postgraduate and con-

tinuing education programs. There are approximately 1,000 Fellows of the Academy who have earned this prestigious degree.

Council to Recommend Informing Patients of Endosseous Implant Limitations. Two scientific councils of the ADA will recommend in a joint report to the profession that patients be advised of the limitations of endosseous implants prior to their use whenever implantation is the chosen treatment procedure.

For the protection of both the patient and the dentist using implants, the patient should be made aware "that the degree of success to be expected from an appliance designed specifically for the patient is at this time not known," according to the Council on Dental Materials and Devices (CDMD) and the Council on Dental Research (CDR).



Betty Deboram Receives Preventive Award from James Harrell

Items of Interest



Dr. Gregory Chadwick

Dr. Chadwick Chosen to Compete in Hatton Awards. Dr. Greg Chadwick was chosen to compete in the Hatton Awards at the March, 1974, Atlanta meeting of the International Association of Dental Research. Dr. Chadwick competed with other projects which were accomplished by researchers who were undergraduate dental students at the time. The research is a study of the similarity between actual private practices and the UNC Dental Research Center model of solo private practice. Dr. Chadwick collected the data for the study as a Pfeiffer research fellow and completed the analysis and report writing under Dr. Chester W. Douglass of the Dental Ecology faculty. Dr. Chadwick will enter graduate training in Endodontics at the University of North Carolina, School of Dentistry this fall.

From Australia. A professor of The University of Adelaide comments on our School of Dentistry: "We use your texts in our school and, on my next visit to the United States, I must visit Chapel Hill. You have some solid teachers."

Dental Admission Test Applicants Number Rises. The annual number of applicants taking the ADA Dental Admission Test has nearly doubled in four years.

The Division of Educational Measurements, a part of the ADA Council on Dental Education, administered admission tests to 19,540 students in 1973, compared to 10,807 in 1969.

Available to the 19,540 examinees were 5,445 openings in the nation's fall class of first year dental students.

Out-of-State Applicants to Dental Schools. The chances of an out-of-state applicant being accepted into a dental school are nationally about one in 20 (one in 50 at UNC), unless the applicant's state has a compact agreement

with the dental school to which he is applying.

Periodontal Screening Clinic. The North Carolina Society of Periodontists is planning to conduct a Periodontal Screening Clinic at the North Carolina Dental Society meeting in Pinehurst this spring.

The objectives in conducting this clinic are:

1. To get some idea of the prevalence of periodontal disease among dentists and their auxiliaries,
2. To show by example how one can conduct a periodontal screening examination, and
3. To expose the practitioners to available patient education material concerning periodontal disease.



Outstanding Dental Company Award. Dental Company 6-3 Charlotte, North Carolina has been selected as the outstanding Naval Dental Company of the nation. Commanding Officer James Graham and his associates were also the outstanding Phase Forces Group of the 6th Naval District.

Seated left to right: Capt. Ed Austin, Cmdr. Jim Graham, Commanding Officer, Cmdr. Joe Porter, Capt. Barry Miller; standing: Lt. Bob Phillips, Cmdr. Norman Sawyer, Medical Corps, Cmdr. Lackey Peeler, Lt. Cmdr. John Kiser, Lt. Joe Stiner, Lt. Cmdr. Jim Devereux, Lt. Skip Motley, Cmdr. John Reynolds, Lt. Cmdr. Bruce Ketner, Capt. Jim Radermacher, Medical Service Corps. Lt. Cmdr. Bill Myers.

Diagnostic Problems Clinic Established. For several years the University of North Carolina has maintained an Oral Cancer Detection Clinic. This clinic was established by a USPHS grant to provide a place where dentists and physicians of North Carolina could refer patients they suspected as having cancerous or precancerous lesions. This clinic now provides a diagnostic service for a wide variety of soft and hard tissue lesions. In order to alleviate patient anxiety upon being referred to the Oral Cancer Detection Clinic, the name of the clinic is being changed to the Diagnostic Problems Clinic. This clinic will be staffed by the Oral Pathology faculty and will be used as a clinical teaching activity. Patients with soft or hard tissue lesions may be referred to the Diagnostic Problems Clinic for examination by contacting the Section of Oral Pathology, UNC School of Dentistry, Chapel Hill, N.C. Phone no.: 966-1161, ext. 215.

Military Pay Bill Omits Dental Officers. Following a brief hearing before its Armed Services Committee (at which no public witness was permitted to testify) the senate passed a bill, S 2770, revising the special pay structure for medical officers of the uniformed services.

The bill would introduce a statutory differential in the compensation system for medical and dental officers, both with respect to the acceleration of eligibility for "special" or "professional" pay which has been authorized on an equal basis since 1947 and with respect to a new permissive bonus pay provision that would be restricted solely to

medical officers. (ADA Leadership Bulletin Vol. IV, No. 2)

The American Academy of Oral Medicine. The Annual Meeting of the Academy of Oral Medicine will take place at Daytona Beach, Florida, at the Daytona Hilton Hotel from May 3 to May 7, 1974. The Scientific Forum will include such prominent speakers as Brigadier General S. N. Bhaskar, Chief of Personnel, United States Army; Dr. D. Walter Cohen, Dean of the University of Pennsylvania, School of Dental Medicine; and others.

Dental Exhibit in Chicago. American dentists have built a major exhibit to dental health and to their profession at the crossroads of the nation.

More than 3 million persons a year from all parts of the country and the world visit the Museum of Science and Industry in Chicago, and it is there that a comprehensive educational display has been permanently installed.

The American Dental Association Health Foundation, the Illinois State Dental Society and the Chicago Dental Society each contributed \$60,000 for the 1,600-square-foot exhibit which was four years in the development.

The dental exhibit takes its place amid other general health exhibits installed by the American Medical Association, the American Cancer Society and the American Heart Association. About 10,000 school groups visit the health exhibit area each year.

Included in the display are a nine-foot full-color cross section of a tooth, a two-seat quiz game, a six-foot mechanically animated mock-up of a lower dental arch, a theater and other electronic components. Nearly every-

thing "works" in one way or another with things to push, pull, press, choose, listen to and watch.

In a ceremony the day the exhibit opened, Dr. Richard W. Janson of the Chicago Dental Society, chairman and coordinator of the planning and construction committee, explained to members of the press the reason why such a sum of money coming from practicing dentists should be invested in an educational museum display:

"We as practicing dentists know that there is nothing that the dentist can do to overcome what a patient will not do. Dental care is wasted if it is provided to people who are indifferent or unmotivated. Those individuals who believe that it is natural to lose all of their permanent teeth will, ultimately, lose them."

Dr. Janson said that the project was developed around the theme that it is unnatural to lose permanent teeth.

He summed up: "A wise man once said that happiness is helping others. We are a happy profession and this is one of our proudest moments."

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PRESIDENT'S REPORT

(Continued from page 7)

turism, or their desire to deal directly with the public.

To assure ourselves of satisfactory solutions, all of these groups should work together in harmony. A good example of successful cooperation was found in getting the preventive dentistry bill through the legislature last year. The dental school, the State Board of Dental Examiners, the Dental Society, the Dental Assistants Association, the Dental Hygienists Association and many other groups, all participated for the good of the profession. I believe that if this program survives the full 10 years it will be an outstanding contribution that the dental profession has made for the people of North Carolina.

In closing let me reiterate that we must keep the people's dental health before us and not just the protection of our profession. Let us not forget that the privilege of practicing dentistry is given by the people of North Carolina for the people of North Carolina.

(January 20, 1974)

GUEST EDITORIAL

(Continued from page 6)

place unsubstantiated opinion in professional deliberations and planning.

A continuing amicability among members of the dynamic health professions is a more difficult assignment, and yet it is more easily attainable than is the ideal of eternal tranquility. Constant consultation, collaboration, communication and cooperation among people within the dental profession comprise the "nuts and bolts" of an ultimate resource which can melt hardened attitudes and avoid an expansion of dissension and social conflict. Dentists must understand these elements of detente and use them conscientiously. Furthermore, when possessed with optimum sociosensitivity, practitioners will be able more easily to resist manipulations of both cynics and zealots, and adhere to the principles and rules in dentistry's code of ethics.

ADA President Williams Calls on Nixon to Investigate Discrimination Against Dentistry in Cost of Living Council's Price Control Proposal. ADA President Carlton H. Williams has called upon President Nixon to investigate the Cost of Living Council's discriminatory treatment of dentists.

At a press conference in Chicago with Dr. C. Gordon Watson, ADA executive director, Dr. Williams denounced the unfair treatment of the dental profession. His remarks were in response to a Cost of Living Council proposal to lift all wage and price controls from the economy May 1, with the exception of the oil industry, hospitals, medicine and dentistry.

Weinberger Statement on Costs Challenged. An incorrect statement by HEW Secretary Caspar Weinberger asserting that the nation's dental bill rose 17 per cent in 1973 brought sharp rebuttal from Dr. C. Gordon Watson, ADA executive director.

Speaking at the Chicago Dental Society's Midwinter Meeting, Secretary Weinberger stated that in 1973 health care expenditures had risen to a total of \$94.1 billion. "In the same year, dental costs rose to a total of about \$5.4 billion. But while the rate of increase for all health care was a whopping 11 per cent in 1973, the costs of dental services rose even more, by 17 per cent," he said.

Dr. Watson told a gathering of newsmen that the Secretary's 17 per cent figure was "just totally inaccurate." He said recently released government figures showed the increase in the nation's total expenditures for dental care was 6.7 per cent in 1973. "And this 6.7 per cent represents a large increase in the amount of dental care and in the num-

ber of dentists providing care and only partially an increase in dental fees.

"The Secretary's use of a 17 per cent figure is completely wrong. He makes it seem as though dental fees have risen 17 per cent," Dr. Watson said, "In actual fact, the official figures released by the Department of Labor show that dental fees rose only 3.7 per cent in 1973."

Dr. Watson said the Secretary's erroneous statement was "most puzzling at a time when the Administration is trying to make a case for keeping dentistry under price control."

"By no stretch of the imagination can the Cost of Living Council justify the continuance of harsh regulations on dentistry," Dr. Williams said. "Dental care costs have *not* contributed to the current rate of inflation. Dental fees, in fact, have risen at a lesser rate than the prices for all services generally."

Dr. Williams told reporters that Cost of Living Council Director John T. Dunlop had announced the Nixon Administration's intention to keep controls on the health industry until the government enacts a national health insurance program.

"If the Administration's intent is to federalize health care through a process of economic strangulation of private practitioners, let it say so candidly and allow that issue to be debated on its merits," Dr. Williams said.

The San Diego ADA president explained to the representatives of wire services, newspapers, television and radio that dentists have had a consistent record of controlling their fees and helping to slow the nation's inflation rate both before and during the economic stabilization program.

"Dentistry is still holding the line on fees," he said. "During the past 12-

month period, the Consumer Price Index shows that dentists' fees rose 3.7 per cent while services in general rose 6.2 per cent, commodities rose 10.4 per cent and food rose 20.1 per cent.

"Yet these sectors of the economy and others that contributed greatly to last year's 8.8 per cent overall inflationary spiral are to be released from controls while the dental profession which has kept its house in order with a 3.7 per cent increase is threatened with a continuation of the government's arbitrary and capricious imposition of restrictions," he said.

Dr. Williams said that the Association would continue to vigorously pursue its suit against the Cost of Living Council, filed in federal court last October, to test the constitutionality of "this overt discrimination."

Many sectors of health care are already excluded from control: clinical psychologists, dieticians, nutritionists, occupational therapists, opticians and optometrists.

At the same time as the government plans to continue dentistry under regulations, the costs the dentist must bear in order to conduct a practice—more than 50 per cent of his gross income—will, for the most part, be freed from controls. Dental laboratory costs, which alone account for 22 per cent of the dentists' fees, have already been exempted from controls. "The decontrol of the rest of the economy will accelerate the severe cost squeeze dentists are already experiencing," Dr. Williams said.

Over the past 10 years while the costs of conducting a dental practice have risen 150 per cent, dentists' fees have risen 56 per cent, a rate which is below the rise in the average costs

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of all services across the economy during the same period.

"Yet in response to the dental profession's success in keeping fee increases at a rate about a third the rate of increase of practice costs, the Cost of Living Council is classifying dental fees with hospital charges which have increased 156 per cent and physicians' fees which have increased 67 per cent during the same 10-year period," Dr. Williams said.

In explaining why dentistry should be treated separately from hospitals and physicians, Dr. Williams pointed out that dentists do not significantly influence hospital costs. "The physician

admits the vast majority of patients to hospitals and prescribes the hospital services they utilize. The majority of dentists deliver care entirely in their own offices, using their own equipment and materials to treat patients," he said.

"The dental profession has more than once asked for the opportunity to have a hearing before the Cost of Living Council to present these facts. The Council has refused even to extend the courtesy of such a hearing.

"I have today sent a message to President Nixon calling upon him to personally examine the Cost of Living Council's discriminatory treatment of a

sector of the economy, dentistry, that has been successful in controlling inflation. We will provide Mr. Nixon with whatever information his staff needs to investigate this unfair treatment, and we are ready to meet with him or any member of his staff at any time."

Dr. Williams said the dental profession had been as patient as possible throughout Phases I through III while its members were called upon to make sacrifices far beyond those demanded from the rest of the economy. "The time for lifting this disproportionate burden from the dental profession is long past due," he said.

Reprinted from ADA Leadership Bulletin, Vol. IV, No. 4.

Inorganic mercury exposure and mercurialism have been with us for many years, being first described by Pliny several hundred years B. C.

Signs and Symptoms

Mercurial gingivitis—salivation and tenderness of gums and mouth.

Mercury line on gums—blue or brown.

Dermatitis—hands, arms, face.

Tremor—shows up first in fingers, eye lids, lips, tongue. Progresses to arms and legs (Danbury shakes).

Erethism—Affected person is easily upset and embarrassed. Drowsiness, depression, loss of memory.

Mercurialantis—Discoloration or mottling of anterior capsule of lens to light brown or coffee brown. Useful for early detection of mercury poisoning since it appears long before any general symptoms appear.

OSHA

Present standard: .10 mg M³ for 8 hour day.

Proposed standard: .05 mg M³ for 8 hour day.

If you are concerned about mercury exposure in your office, a state agency, the Occupational Health Branch, Division of Health Services, P. O. Box 2091, Raleigh, N. C. 27602 is ready to monitor the mercury level at no cost to you on request. This is a consultative service. Phone #919-829-3680.

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ANGEL ARCH FROM THE MOLAR

Would you believe the newest (1964) United States National Park—Utah's Canyonlands—embraced among original Congressional proposals a paragraph stating ". . . it was feared some people may be repelled and call the scenery ugly; not because it is drab or dull, but because it is so different as to be incomprehensible . . . and therefore hostile."

Part of the Colorado plateau region in Utah's southeastern Wayne County, this rugged park contains 402 square miles (257,640 acres). It is a colorful area filled with fantastic land forms and arid wilderness, situated approximately 30 miles southwest of Moab. Angel Arch stands at the park's extreme southeastern corner, on the east bank of Salt Creek in a section called The Needles.

Canyonlands is referred to as "indescribable." Its fractured face began taking shape ages ago when sandstone crust cracked during a general uplift of the earth. Seeping ground water widened the cracks, swirling streams gouged canyons, and faulting formed valleys. Weather erosion applied the finishing touches.

Choice examples of mighty natural dissecting forces—rushing streams, wind, frost and rain—which slowly abrade rock of varying resistance, are presented here. Their forms include needles and arches, mesas and buttes, quiet parklike bottoms, tumultuous river rapids, breakneck scarps, and standing rocks sliced thick or finny.

One baffled venturer called it "standing up country." He is quoted as having said, "There is more of this place standing up than there is lying down." Sandstone has been broken, eroded, and pushed about into a jumble of arches, pillars, spires, valleys and balanced rocks. Form, texture and color of rocks in the canyon heartland are wilder, less believable and more whimsically painted than visitors can find words to describe.

Angel Arch, as seen from the Molar (or "Dentist's Delight"), is 150 feet high and 130 feet wide. It's yawning cavity makes men appear like Lilliputians. Head of the graceful figure, for which the arch is named, projects at upper right of cover photo. Body appears on the opposite side.

Although created as this country's 32nd national park almost ten years ago, Canyonlands is not a place for the uninitiated or unprepared tourist. Where motorized transportation is feasible, four-wheel drive vehicles are mandatory. Other areas may be traversed via small boat or horseback. But the serious explorer must depend upon shanks' mare, and carrying his own drinking water.

He will be rewarded not only with indescribable, never-to-be-forgotten geological phenomenon, but by long departed Indians' grain storehouses still containing corn dried iron-hard over a thousand summers. And, on the walls of some caves, clearly visible palm prints of prehistoric man appear.

—Courtesy of Pneumatic Packaging, Vol. 36, No. 4, Aug., 1973



Major General Roger Hombs

Major General Roger Hombs is Assistant Surgeon General for Dental Services, U.S. Air Force, Washington, D.C.

General Hombs is a native of Iowa. He received his doctor of dental surgery degree from the School of Dentistry, Washington University, in 1945. He has been in private dental practice and he has served on the faculty of Washington University, School of Dentistry.

General Hombs entered active military duty in 1946. He has served in the Philippine Islands; Camp John Hay; Clark Air Base; Sheppard Air Force Base; Olathe Naval Air Station; Brooks Air Force Base; Thule Air Base, Greenland; Stewart Air Force Base; Randolph Air Force Base; Albrook Air Force Base, C. Z.; Carswell Air Force Base; Wright-Patterson Air Force Base; and Langley Air Force Base.

In 1967 General Hombs was appointed Deputy Assistant Surgeon General for Dental Services, and in August 1970 he was appointed Assistant Surgeon General for Dental Services.

General Hombs is a member of the American Dental Association, Fellow of the American College of Dentistry, Fellow of the International College of Dentistry, and Life Member Delta Sigma Delta fraternity.

He was promoted to the grade of major general August 1, 1972.



**Lieutenant Governor
James B. Hunt**



**Dr. L. M. Kennedy
President-elect A.D.A.**

Dr. Lynden M. Kennedy of Dallas is president-elect of the American Dental Association. Elected to the office in November 1973, his term as president of the Association will be from November 14, 1974, to October 30, 1975.

Dr. Kennedy is also the current president of the Texas State Board of Dental Examiners and a past president of the Texas Dental Association. He has been a member of the ADA House of Delegates, the Association's legislative body, since 1965 and served as a member of the ADA Task Force on National Health Programs in 1970-71.

Dr. Kennedy is a graduate of Baylor University College of Dentistry. Following graduation, he became a member of the faculty until being commissioned in the U. S. Navy where he served as a dental officer from 1942-46.

He has held the office of president in the Dallas County Dental Society and the Texas Academy of General Dentistry. He also served as chairman of the Texas section, American College of Dentists, and as editor of *The Texas Dental Journal*.

In addition, Dr. Kennedy's professional memberships include the American Association of Dental Examiners, International College of Dentists and Federation Dentaire Internationale. He is a member of Delta Sigma Delta and Omicron Kappa Upsilon.

Dr. Kennedy and his wife, Jimmie, have two children—a daughter Terri, son John — and three grandchildren.



Preliminary Program

118th Annual Session

**North Carolina
Dental Society**

May 12-15, 1974

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PINEHURST**

THEME—NEW FRON



Dr. Darden Eure, Jr.
General Arrangements Chairman

This predominantly clinical program has been planned to provide for the practitioner a broad spectrum approach to the many dental problems suffered by patients in the twilight years of their dentition. It represents a comprehensive study of more current concepts of dental practice.



Dr. Baxter Sapp
Program Chairman

IMPLANTS FOR THE GENERAL PRACTITIONER— DON'T AND DO'S



Dr. Thomas E. Braly

This presentation will include the history of implantology, both European and U. S., types of implants, the technique of inserting bald implants, as well as why they failed. The reasons for implant design and pontic design will be of interest. Histology of the tissue adjacent to implants will be discussed. The all-important epithelial cuff around the implant neck will be discussed at length throughout the presentation.

The most important, but often forgotten, aspect of implantology, the periodontal prevention and plaque removal aspects, will be presented. Time will be allotted to speak to the point of what is the status of implants in 1974, as well as the future of implants and what is being done in implant research.

Dr. Braly is a member of the Southern Academy of Oral Surgery, Southern Academy of Periodontology, American Academy of Periodontology, and the American Academy of Implant Dentistry.

He was National President, Emory Dental Alumni Associa-

VARIABLES INFLUENCING SUCCESS IN ENDODONTICS



J. B. Freedland, D.D.S.

To achieve predictable success in other than routine endodontic cases, it is essential to understand the diagnostic and therapeutic requirements in those cases and present combined endo-perio lesions, resorptions (internal and external), avulsions, systemic disease, and large osteolytic lesions. Factors that influence pain, endosseus implants, replantation (intentional), pain, and apexification will be discussed.

Dr. Freedland is a Fellow of the International College of Dentists, and a Fellow of the American College of Dentists. He is a member of Omicron Kappa Upsilon, National Honor Dental Society. He has been President of the American Association of Endodontists. He was Charter Director of the American Board of Endodontics. He holds the distinction of being an international figure in the field of Endodontics.

tion, and National President, Emory Alumni Association.

He is a Fellow of the American College of Dentists and Fellow of the International College of Dentists.

TIERS IN DENTISTRY

CROWN AND SLEEVE-COPING RETAINERS IN PARTIAL PROSTHESIS



Dr. Joseph Dietz



Dr. Irving Yalisove

Sophisticated periodontal surgical procedures are now salvaging teeth which were condemned to extraction several years ago. It is the responsibility of the restorative dentist to utilize these salvaged teeth so that they are maintained in a state of good periodontal health. The crown and sleeve-coping technique furnishes several combinations in the selection of a periodontal prosthesis for patients with complicated restorative problems as well as the more routine clinical applications.

Dr. Dietz is a staff member in the Departments of Continuing Education, University of Maryland, School of Dentistry, University of Pennsylvania, School of Dental Medicine, New Jersey College of Medicine and Dentistry, and Tufts University, School of Dental Medicine.

Dr. Yalisove is an Assistant Professor in the Department of Restorative Dentistry at the University of Pennsylvania, School of Dental Medicine. He is a Fellow of the International College of Dentists. He has been a lecturer and clinician for the past twenty-five years.

THE PATIENT IN FACIAL PAIN



Ernest W. Small, D.D.S., M.S.
Professor and Chairman, Department of Oral Surgery, University of North Carolina

Patient Evaluation, Cecil R. Lupton, D.D.S., Professor of Oral Surgery. The general practitioner of dentistry's role in the management of the patient in facial pain not just of "dental origin" a) role in diagnosis; b) role in patient evaluation, physical diagnosis, medical history; c) role in treatment; d) role in referral and consultation.

Neuroanatomy of Facial Pain, John M. Gregg, D.D.S., M.S., Ph.D., Associate Professor of Oral Surgery. A discussion of pain and its mechanisms, pathways, manifestations; how to evaluate and measure pain.

Organic Bases of Facial Pain, Fred A. Bell, D.D.S., M.S., Assistant Professor of Oral Surgery. Specific disease states which are manifested by facial pain and their recognition —a) dental origin; b) sinus origin; c) systemic origin; d) benign and malignant disease.

Psychogenic Bases of Facial Pain, Ernest W. Small, D.D.S., M.S. The dentist's role in the diagnosis and treatment of the patient in pain without an organic basis; a discussion of the TMJ pain dysfunction syndrome, recognition of patient types, diagnosis and treatment.

The Management of the Patient, Robert L. Campbell, D.D.S., Assistant Professor of Oral Surgery. Pain and acute anxiety state; synopsis of techniques available: oral sedation, I.V. sedation, I.M. sedation, inhalation (N_2O/O_2).

Current Research In Facial Pain, John M. Gregg, D.D.S., M.S., Ph.D., Associate Professor of Oral Surgery. New drugs, new techniques, acupuncture, the UNC Pain Clinic.



Top left to right: Dr. Rhodes Lupton and Dr. John Gregg
Bottom left to right: Dr. Fred Bell and Dr. Robert Campbell

PROGRAM

Sunday, May 12

8:00 a.m.	Golf Tournament, Pinchurst Country Club	12:00 Noon	International College of Dentists Luncheon, Crystal Room
12:00 Noon	Lunch	2:00 p.m.	J. B. Freedland, Cardinal Ballroom
2:00 p.m.	Table Clinics		Moderator—William L. Hand
4:00 p.m.	Board of Directors, Dental Foundation of North Carolina, Inc., Azalea Room	3:30 p.m.	Subject: Variables Influencing Success in Endodontics—Part I
4:00 p.m.	Academy of General Dentistry, Holly Inn		Thomas E. Braly, Cardinal Ballroom
5:30 p.m.	Social Hour, Poolside Honoring North Carolina Dental Auxiliary		Moderator—Kenneth Ray
8:30 p.m.	First General Session, Cardinal Ballroom Presiding—James A. Harrell Invocation and Necrology Report—R. J. Shankle, Editor, NORTH CAROLINA DENTAL JOURNAL Address—James A. Harrell, President, North Carolina Dental Society Report—Thomas G. Nisbet, President, Dental Foundation of North Carolina, Inc. Report—John M. Faust, Trustee, Fifth District, American Dental Association Address—Lynden M. Kennedy, President-Elect, American Dental Association Nomination of Officers for 1974-1975	5:00 p.m.	Subject: Implants for the General Practitioner—Don'ts and Do's—Part I
		5:00 p.m.	Commercial Exhibits Close
		5:00 p.m.	Social Hour for Commercial Exhibitors, Pine Room
		5:00 p.m.	Fraternity Hours Psi Omega—Poolside Xi Psi Phi—West End Porch Delta Sigma Delta—Azalea Room
		6:00 p.m.	Dinner
		8:30 p.m.	Second General Session, Cardinal Ballroom Presiding—James A. Harrell Invocation—Charles W. Horton, President-Elect, North Carolina Dental Society Address—Major General Roger Hombs, United States Air Force Report—Cecil A. Pless, President, State Board of Dental Examiners

Monday, May 13

7:30 a.m.	District Officers Conference Breakfast, Crystal Room Presiding—James A. Harrell, President Invocation—Gerald M. Cathey, Vice-President, North Carolina Dental Society Address—Lynden M. Kennedy, President-Elect, American Dental Association	9:00 a.m.	Past Presidents' Breakfast, Crystal Room Presiding—Joseph M. Johnson Address—James W. Bawden, Dean, University of North Carolina, School of Dentistry
9:00 a.m.	Commercial Exhibits Open	9:00 a.m.	Commercial Exhibits Open
9:00 a.m.	Irving Yalisove, Cardinal Ballroom Moderator—Murry Holland Subject: Removable Telescopic Prosthesis for Weak Abutment Teeth—Part I	9:00 a.m.	Thomas E. Braly, Cardinal Ballroom Moderator—Kenneth R. Diehl Subject: Implants for the General Practitioner—Don'ts and Do's—Part II
10:30 a.m.	Joseph B. Deitz, Cardinal Ballroom Moderator—Jack Sowter Subject: Removable Telescopic Prosthesis for Weak Abutment Teeth—Part II		

Tuesday, May 14

7:30 a.m.	Past Presidents' Breakfast, Crystal Room Presiding—Joseph M. Johnson Address—James W. Bawden, Dean, University of North Carolina
	Commercial Exhibits Open

10:30 a.m.	J. B. Freedland, Cardinal Ballroom Moderator—Edward F. Harris Subject: Variables influencing Success in Endodontics—Part II
12:00 Noon	American College of Dentists Luncheon, Crystal Room
Discussion and Summary	
2:00 p.m.	Irving Yalisove, Cardinal Ballroom Moderator—Pearce Roberts Subject: Removable Telescopic Prostheses for Weak Abutment—Part III
2:45 p.m.	Joseph B. Deitz, Cardinal Ballroom Moderator—Pearce Roberts Subject: Removable Telescopic Prostheses for Weak Abutment—Part IV
3:30 p.m.	Thomas E. Braly, Cardinal Ballroom Moderator—Pearce Roberts Subject: Implants for the General Practitioner—Don'ts and Do's—Part III
4:15 p.m.	J. B. Freedland, Cardinal Ballroom Moderator—Pearce Roberts Subject: Variables influencing Success in Endodontics—Part III
5:00 p.m.	Commercial Exhibits Close
5:30 p.m.	Reception, Azalea Room, Honoring Members and New Members
7:00 p.m.	Annual Banquet, Dining Room Toastmaster—William L. Hand, Jr. Invocation—James A. Harrell, Jr. Presentation of Golf Awards Presentation of Honors—James A. Harrell Andrew M. Cunningham James W. Bawden Presentation of President's Emblem—W. L. Hand, Jr. Introduction of Lieutenant Governor Hunt—Robert H. Watson Address—His Excellency the Honorable James B. Hunt, Lieutenant Governor of the Great State of North Carolina
8:30 p.m.	Entertainment, Cardinal Ballroom The New Century Platters
9:30 p.m.	Dance, Cardinal Ballroom
Wednesday, May 15	
7:30 a.m.	Breakfast, American Society of Preventive Dentistry, Crystal Room
	
The New Century Platters	
9:00 a.m.	The Patient in Facial Pain, Cardinal Ballroom Moderator—James Privette
9:00 a.m.	Ernest W. Small Introduction of topics and panel participants
9:05 a.m.	Cecil R. Lupton—"Patient Evaluation"
9:35 a.m.	John M. Gregg—"Neuroanatomy of Facial Pain"
9:45 a.m.	Fred A. Bell—"Organic Bases of Facial Pain"
10:05 a.m.	Ernest W. Small—"Psychogenic Bases of Facial Pain"
10:35 a.m.	Robert L. Campbell—"Management of the Patient"
10:45 a.m.	John M. Gregg—"Current Research in Facial Pain"
11:05-11:10 a.m.	Ernest W. Small—Summary
11:10-11:30 a.m.	Panel Discussion and Response to Audience Questions
11:30 a.m.	Third General Session, Cardinal Ballroom Presiding—James A. Harrell
	Invocation—J. Harry Spillman, Secretary-Treasurer, North Carolina Dental Society
	Installation of Officers—James A. Harrell
	Drawing for Door Prizes
	Adjournment, sine die

The North Carolina Dental Auxiliary

The North Carolina Dental Auxiliary is going to spread a real "smorgasbord" of activities before the ladies at the meeting in Pinehurst this year. Our "smorgasbord" will consist of social, professional, creative, and athletic activities, so that each lady may pick and choose the most enjoyable way to spend her time in Pinehurst.

Sunday evening the ladies will be special guests of honor at a cocktail party the North Carolina Dental Society has planned, followed by dinner with husbands. The ladies are invited to attend the First General Session after dinner.

Monday morning the ladies can choose what they would like to do. For the first time mini-clinics will be held. Theme for the mini-clinics is *Everything You Wanted To Know But Were Afraid To Ask*. Dr. Louie Patseavouras, a prominent cosmetic surgeon, will present his program on *Current Concepts In Cosmetic-Plastic Surgery*. Ivey's Stores are sending a New York make-up artist to talk about *Painting A Pretty Picture With Make-Up*. Mrs. Charles (Betty) Reed, a very talented dental wife, will give a demonstration of *Creative Culinary Artistry*. For those with a more competitive spirit, golf and tennis tournaments will be held on Monday with prizes they choose for winners.

On Monday evening at the business meeting of the Dental Auxiliary, some lucky lady will walk away with a lovely silver service. Thompson Dental Company has graciously donated this fabulous door prize.

On Tuesday the ladies will move to the Country Club of North Carolina for one of their delicious luncheons. Keynote speaker for the ladies luncheon will be actress, nightclub performer, and television spokeswoman, Julia Meade. Julia has a list of credentials difficult to imagine. She has done more television commercials than any other actress and currently has her own syndicated television program, "Julia Meade and Friends."

Mary Gallagher Barelli, author of "My Life With Jacqueline Kennedy" will be a special guest of the Auxiliary at the luncheon. Pat Holshouser, wife of the Governor of North Carolina, has also been invited to attend the luncheon.

Tuesday evening will feature a reception honoring members and new members of the North Carolina Dental Society. The annual banquet will follow the reception. A dance featuring a floor show by the New Century Platters on Tuesday evening will climax the activities planned for The Auxiliary.



JULIA MEADE

Julia Meade was born in Boston, and grew up in Ridgewood, N. J., where she went to high school before enrolling in the Yale Drama School. Summer stock followed Yale, and then small parts on television.

In 1953, she was invited to do a commercial on the Ed Sullivan Show and remained for nine years as the commercial spokeswoman, while making intermittent excursions into Broadway productions and stock.

As spokeswoman for Kodak and the Ford Motor Company on the Sullivan program, and for the American Gas Association, Julia had the unique distinction of being seen by more people each week than any performer who stars on his own series.

She has starred in Broadway productions including *The Tender Trap*, *Roman Candle*, *Double in Hearts*.

Motion pictures in which she has appeared are *Pillow Talk*, *Tammy Tell Me True*, and *Zotz*.

For her performance as Mary in *Mary, Mary*, Julia earned the coveted Sarah Siddon Award as Chicago's Actress of the Year.

It was inevitable that she would be offered a program of her own to head on television. The first was aptly named "Dear Julia Meade" and was syndicated by the Triangle Network for three years. Her current show, "Julia Meade and Friends," is a consumer oriented celebrity show syndicated on cable television.

In private life, Julia is the wife of Worsham Rudd, a public relations executive, and is the mother of two young daughters, Caroline and Alice. The family also includes two cats. When Julia is not hard at work performing, she relaxes by ice skating, following baseball and delighting her family and friends with her gourmet cooking. The Rudds reside in New York City and have a summer home in Maine.



Mrs. Bonnie Cashion
President



Mrs. Richard Fields
President-Elect



Mrs. Jo Pattishall
Vice President



Mrs. Barbara Horton
Recording Secretary



Mrs. N. C. Johnson
Corresponding Secretary



Mrs. John Pavlich
Treasurer



Carolyn Hinnant was last year's
Scrap Amalgam Director



Betty Moye is this year's
Scrap Amalgam Director

NEW FRONTIERS IN COMMERCIAL EXHIBITS

Monday, May 13, 9:00 a.m. to 5:00 p.m.

Tuesday, May 14, 9:00 a.m. to 5:00 p.m.

NORTH, SOUTH & DOGWOOD ROOMS, CORRIDOR OFF MAIN LOBBY & CARDINAL BALLROOM... LOBBY

You are urged to visit the commercial exhibits. The manufacturers, dealers, laboratories and other organizations will be represented by highly qualified people who can give you helpful hints on economical and intelligent buying.

Firm Name	Booth	Firm Name	Booth
American Massage, Inc., Lighthouse Point, Florida	28	National Dental Supply Company,	
Astra Pharmaceutical Products, Inc., Boston, Massachusetts	64	Abington, Pennsylvania	7
Beck & Company, E. A., Costa Mesa, California	76	Ney Company, J. M., Bloomfield, Connecticut	57
Belmont Equipment Corporation, Somerset, New Jersey	70	Oral-B Division of Cooper Laboratories, Inc., Bedford Hills, New York	73
Block Drug Company, Inc., Jersey City, New Jersey	15	Pelton & Crane Company, Charlotte, North Carolina	82 & 83
Bosworth Company, Harry J., Chicago, Illinois	41	PGA Dental Laboratory, Inc., Atlanta, Georgia	65
Cambiare, Ltd., Greensboro, North Carolina	84 & 85	Precision Sales & Service, Inc., Trinity, North Carolina	23
Cameron-Miller Surgical Instrument Company, Chicago, Illinois	9	Premier Dental Products Company, Philadelphia, Pennsylvania	10
Carolina Dental, LaGrange, North Carolina	21	Procter & Gamble Distributing Company, Cincinnati, Ohio	67
Carolina Dental Laboratory, Inc., Raleigh, North Carolina	69	Professional Sales Associates, Inc., Barrington, Illinois	31 & 32
Charlotte Laboratory, Inc., Charlotte, North Carolina	8	Ritter Company, Rochester, New York	42 & 43
Chayes Virginia Corporation, Evansville, Indiana	48 & 49	Saunders Company, W. B., Philadelphia, Pennsylvania	5
Coastal Dynamics Corporation, Westlake Village, California	71 & 72	Siemens Corporation, Iselin, New Jersey	44 & 45
Codesco/Keener Supply Division, Asheville, North Carolina	11	Squire Dental Studio, Inc., Charlotte, North Carolina	.55
Coe Laboratories, Chicago, Illinois	18 & 19	Sturgis Laboratory, J. Minor, Atlanta, Georgia	6
Den-Tal-Ez Manufacturing Company, Des Moines, Iowa	66	Teledyne Aqua Tec, Fort Collins, Colorado	68
Dentsply International, York, Pennsylvania	50, 51 & 52	Teledyne Dental, Denver, Colorado	56
Executive Cabinet Company, Plainfield, New Jersey	33	Thompson Dental Company, Greensboro, North Carolina	24, 36, 37, 38, 39 & 40
Healthco/Powers & Anderson Dental Supply, Charlotte, North Carolina	77, 78, 79, 80 & 81	Tincher Dental Laboratories, Inc., Charleston, West Virginia	75
Hoyt Laboratories, Needham, Massachusetts	20	Unitek Corporation, Monrovia, California	29 & 30
Janar Company, Inc., Grand Rapids, Michigan	13	Upjohn Company, Chamblee, Georgia	34
Johnson & Johnson, Atlanta, Georgia	14	Vacudent Sales Corporation, Salt Lake City, Utah	59 & 60
Kerr Manufacturing Company, Romulus, Michigan	61	White, S. S., Division of Pennwalt, Philadelphia, Pennsylvania	25, 26 & 27
Lee Pharmaceuticals, South El Monte, California	35	Woodward Prosthetic Company, Greensboro, North Carolina	1, 2, 3 & 4
Life-Like Ceramics, Inc., Atlanta, Georgia	74	Young Dental Manufacturing Company, Maryland Heights, Missouri	.46
Lilly & Company, Eli, Indianapolis, Indiana	47		
Litton Dental Products, Raleigh, North Carolina	53 & 54		
MDT Corporation, Gardena, California	62 & 63		
Magna Laboratories, Inc., New York, New York	12		
Midwest American, Melrose Park, Illinois	16 & 17		

NEW FRONTIERS TABLE CLINICS

SUNDAY, MAY 12

Use of N-O-O₂: Sedation in Dental Office, Southeastern Analgesic Society.

Rubber Dam, Drs. Mike O'Conner and Diana Yanik, Asheville.

Let's Prevent (Extra Orthodontic Complications), Dr. James Taylor, Asheville.

Office Manual and Procedures, Dr. John R. Dunn, Charlotte.

Baby Bottle Decay—Management, Dr. Barry G. Miller, Charlotte.

Surgical Correction of Maxillofacial Deformities, Drs. Marten W. Quadland and Rodger H. Lofland, Winston-Salem.

Conventional Bleaching Technique Used on Non-Vital Endodontically Treated Teeth, Dr. Edward C. Bonomo, Charlotte.

New Odontogenic Tumors, Mr. Gregory Chadwick, Student, UNC School of Dentistry.

Incisal Guidance, Dr. Guy Haddix, Statesville.

Multi-Disciplined Treatment for Occlusal-Facial Disharmonies, Dr. Galen W. Quinn, Department of Orthodontics, Duke Medical Center.

Furcation Involvement, Dr. Ralph Setzler, Wilmington.

Nutrition, Mrs. Benae Martin, Wilmington.

The Lingually Locked Incisors, Dr. H. Curtis Bowens, Durham.

Patient Dose in Dental Radiographic Procedures. Dr. John W. Preece, Chapel Hill.

Surgical Orthodontics, Dr. Tony Traynham, Graduate Student, Duke Medical Center.

An Example of a Low Gold Dental Casting Alloy, Dr. Morris H. Griffin, Durham.

Workmen's Compensation, Dental Rules and Regulations, Dr. D. W. Seifert, Raleigh.

Tricks of the Trade, Margaret Cash, Nancy Wicker.

Gold Plating in Crown and Bridge, Dr. Hugh Douglas.

Precision Attachments, Dr. Herbert King.

Zest Anchor Technique in Full Denture Construction, Dr. Robert Poteat.

Methods to Completely Seat Crowns, Dr. Harry Brandau.

Resin Temporaries, Dr. Eddie Brooks.

Uses of the Omnivac, Dr. John Grim.

Advantages of Silver Dies, Dr. Ray S. Krug.

North Carolina Dental Hygienists' Association



TWENTY-SEVENTH ANNUAL MEETING

May 12-14, 1974

Sunday, May 12

- 1:00- 5:00 p.m. N.C.D.H.A. Executive Council Meeting
Educational Leaders Workshop
9:00 p.m. Registration
"Rap with Konnetta"—ADHA President

Monday, May 13

- 8:00 a.m. Registration
9:00 Opening Session—Whispering Pines
9:00 JADHA Meeting—Hyland Hills Motor Lodge
11:00 Alumni Reunion Brunch
12:15 p.m. Business Session
2:00 p.m. NCDA—NCDHA Joint Forum—
"Education, Legislation, Auxiliaries:
New Directions in Expanded Functions?"
6:00- 7:30 p.m. President's Reception—Poolside, Whispering Pines CC
9:00 p.m. NCDA Annual Dance

Tuesday, May 14

- 8:30 a.m. Registration—"Continental Breakfast"
9:00 a.m. Second Business Session
10:00 a.m. Scientific Session
11:00 a.m. Table Clinics
12:00 M. Lunch
1:00 p.m. Leadership Workshop—"Motivation"—
Open to All
7:00- 8:30 p.m. New Executive Council Meeting

North Carolina Dental Assistants Association



TWENTY-FOURTH ANNUAL SESSION

May 12-15, 1974

Saturday, May 11, 1974

- 3:00- 5:00 p.m. Registration
5:00 p.m. Nominating Committee
8:00 p.m. Board of Directors

Sunday, May 12, 1974

- 9:00 a.m.- 5:00 p.m. Registration
10:00 a.m. FIRST SESSION OF GENERAL ASSEMBLY
2:00 p.m. General Session
9:00 p.m. "VIN ET MUSIQUE" Social Honoring ADAA Guests

Monday, May 13, 1974

- 9:00 a.m.- 5:00 p.m. Registration
10:00-11:00 a.m. SECOND SESSION OF GENERAL ASSEMBLY
11:30-12:00 a.m. Balloting and District Caucuses
2:00- 5:00 p.m. NCDA—NCDHA JOINT EDUCATIONAL FORUM
9:00 p.m. "COULEUR MOI BEAUTE" DANCE

Tuesday, May 14, 1974

- 9:00 a.m.- 3:30 p.m. Registration
10:00 a.m. EDUCATION FORUM
12:30- 2:00 p.m. Student Luncheon Honoring Students and NCDA Past Presidents
3:00- 4:00 p.m. NCDA TABLE CLINICS
4:00- 5:00 p.m. Hospitality Hour for Annual Session Committee Chairmen and Committee members

Wednesday, May 15, 1974

- 9:00-10:30 a.m. Registration
10:00 a.m. THIRD SESSION OF GENERAL ASSEMBLY
Installation of officers
Post-Convention Board of Directors

Continuing Education

UNIVERSITY OF
NORTH CAROLINA
SCHOOL OF DENTISTRY
CONTINUING EDUCATION
COURSES

April 1974-December 1974

April 26-28

Intra-Oral Radiographic Techniques
Dr. John Preece and Mrs. Sue White
Tuition—\$65.00

April 29-30, May 1

Endodontics, 1974
Dr. R. J. Shankle
Tuition—\$150.00 plus kit at \$55.00

May 3-4

Fixed Prosthodontics for the General Practitioner
Drs. Brooks, Grim, Irons, Krug, Murray and Pierce
Tuition—\$100.00

May 16

Positive Methods for Increasing Stability and Retention of Dentures
Drs. Dobson, Healey, McArthur, and Wood (Removable Prosthodontics)
Tuition—\$50.00

May 24

Amalgam Restorations
Operative Staff
Tuition—\$60.00

June 3-7

Clinical Dental Hygiene
Dental Hygiene Faculty
Tuition—\$100.00

July 18-20

Current Concepts in Operative Dentistry
Operative Staff
Tuition—\$150.00

July 18-20

Nitrous Oxide Sedation
Dr. E. W. Small (Oral Surgery)
Tuition—\$150.00

July 22-24

Bread and Butter Pedodontics
Dr. T. R. Oldenburg
Tuition—\$125.00

July 25-27

Diagnosis and Treatment of Minor Irregularities in the Developing Dentition
Dr. T. R. Oldenburg (Pedodontics)
Tuition—\$125.00

August 12-16

Interpersonal Relationships and Communication Skills (Workshop)
Dental Hygiene Faculty

August 19

Four Handed Dentistry
Dr. Doug Strickland
Tuition—\$75.00, Dentists \$25.00,
Auxiliaries

September 28-29

Essential Radiographic Interpretation and Oral Pathology
Drs. Burkes and Preece (Oral Diagnosis)
Tuition—\$125.00

October 7-9

Surgical Correction of Maxillofacial Deformities
UNC Department of Oral Surgery and Prominent Visiting Clinicians
Tuition—\$150.00

October 18

Esthetic Considerations of Porcelain Restorations
Dr. Forest Irons (Fixed Prosthodontics)
Tuition—\$80.00

November 13-15

Patient Management
Faculty and Staff, Department of Oral Surgery
Tuition—\$150.00

December 4-5

Current Concepts in Periodontics
Staff-Department of Periodontics
Tuition—\$125.00

December 6

Dental Seminar Day
Advances in Pedodontics for General Dentists, Dr. Spencer Frankl, Boston

December 13

Acid Etch Technique for Resins
Operative Faculty
Tuition—\$60.00

Boston University School of Graduate Dentistry
Continuing Education Courses 1974

May 1

The Telescopic or Over-Denture
Dr. James Thiel
Tuition—\$35.00

May 2-3

The Short Span Fixed Bridge
Dr. Leo Talkov, Dr. Donald Mori, Dr. Philip Schoolnik, Dr. Maurice Michaud
Tuition—\$150.00

May 2-4

Clinical Periodontal Surgery
Dr. Gerald M. Kramer and Dr. J. David Kohn (Course filled; Next date: Dec. 12-14, 1974) Enrollment limited to 12
Tuition—\$185.00

May 5-7

Periodontal Prosthesis
Dr. Gerald M. Kramer and Dr. Myron Nevins, and Dr. Howard M. Skurow (Course filled; Next date: Nov. 22-24) Enrollment limited to 12
Tuition—\$185.00

May 10-11

Seminar in Endodontics, Periodontics, Prosthetics
Dr. Henry M. Goldman, Dr. Herbert Schilder, Dr. David Baraban
Tuition—\$150.00

May 13-17

Nonsurgical Endodontics
Dr. Herbert Schilder & Staff
Tuition—\$300.00

May 15

Periodontics for the Dental Hygienist
Dr. Gerald M. Kramer, Dr. Nicholas Dello Russo, Dr. Gary Reiser
Tuition—\$40.00

June 13-14 and August 8-9

Three Dimensional Filling of Root Canals with Warm Gutta Percha
Dr. Herbert Schilder
Tuition—\$175.00
Enrollment limited to 10

Items of Interest



Ready for This? "Doctor, if you had only told me that the medicine was so dangerous, I would have kept it locked away from my children."

Are you ready to hear that?

One of the most common medical emergencies among children is the accidental ingestion of substances around the home, particularly medicines.

In 1972, more than 160,000 cases of accidental ingestions were reported—the majority involving children under 5 years of age. Estimates are that only one in seven is reported, making the actual number close to a million a year.

Dentists in particular, knowing the psychology of the mouth, can explain why. Parents will be grateful to you for presenting this information to them when you prescribe medicines for them or for their children.

Children from the time of their birth experience oral gratification. Bottle and breast feeding are only the early factors in the developmental patterns that place emphasis on the mouth.

The infant grabs someone's finger—and into the mouth it goes. A baby rattle, almost any plaything, ends up the same way.

It is no surprise, then, that an infant starting to crawl finds things beneath the kitchen sink or near the bathroom

floor which end up in his mouth and are often swallowed.

The toddler, able to stand, can reach pills inadvertently left on the nightstand or an open purse left on the bed.

The young child who has learned to climb has the medicine cabinet within reach—and the aspirins, the drugs and other medications.

Counseling parents on the dangers of misusing medications should include information on the rearrangement of storage. Most bathroom medicine cabinets do not have locks. Better alternatives are lockable cabinets, drawers, linen closets and even fishing tackle boxes. Further:

—Medicines should never be referred to as "candy."

—Parents should not take medicines in the presence of children. Children are notorious imitators.

—Medications should be disposed of after the condition for which they are prescribed has passed.

—Dark rooms are no place to give or take medicines.

—Labels should be read paying close attention to recommended dosages. And always, medicines should be kept in the correct containers.

—Medicines should never be set aside while you answer a telephone or the door.

You can insist that your pharmacists place medications you prescribe in new safety containers which are now standard. It is essential that your patients not ask pharmacists to substitute conventional-type packages unless some

condition, such as arthritis, requires it.

In order to be "child-resistant," the container must be effectively closed after use. In most cases, this is a matter of properly closing the cap.

Safety packaging is not a "cure-all" for poisoning. The container is only expected to keep the contents secure from most children. Some children, because of their ingenuity and manual dexterity, will succeed in opening the package.

National Poison Prevention Week is observed this month, March 17-23. It is a good time to re-examine our prescribing procedures to be certain we are doing our part to help prevent accidental ingestions.

PAIN

(Continued from page 13)

and neuro-pathology, the ancient and universal experience of pain may be entering a new era of scientific understanding.

This investigation was supported by NIH research grant numbers DE 02668 from the National Institute of Dental Research and by NIH grant number RR 05333 from the Division of Research Facilities and Resources.

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Goldman, H. M., and Cohen,
D. W. Periodontal Therapy,
ed. 4. St. Louis, The C. V. Mosby
Company, 1968, pp. 319-320.

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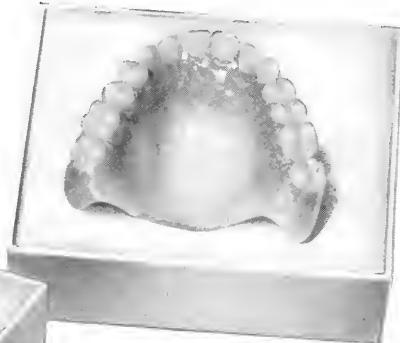
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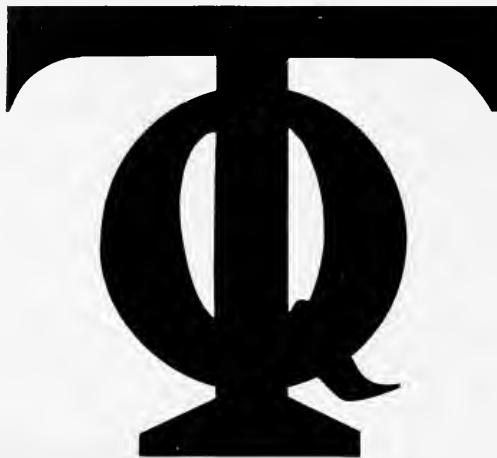
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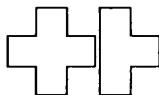
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ABOUT THE COVER

A scene on Portsmouth Island. The Island is a part of the Outer Banks of North Carolina. The Island was originally called "Wococon" by the Indians. Portsmouth town was the first and for many years the largest town on the Outer Banks. The population reached a high of 505 in 1850 and today there are no permanent residents. Although Portsmouth is a ghost town of the past and accessible only by small private boat, it is an adventure for the curious and symbolic of North Carolina as *Variety Vacationland*. Photo is by Joel Arrington and furnished by the Travel Information Division, Department of Conservation and Development.

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AUGUST 1974

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EDITORIAL



How Many Dentists Should North Carolina Educate?

The question of the future expanding of our School of Dentistry or constructing additional ones is frequently pondered. Such expansion could be questioned by the Council on Dental Education, by the State Legislature, and by the practicing dentists of North Carolina. Perhaps we should continue to lead and concentrate further in the quality of our graduates and provide training in skills of diagnosis, and treatment planning of excellence beyond that in dental education today.

The population to dentist ratio may no longer be worthy of discussion. Consideration may be better given to: 1) Mal-distribution of dentists effecting shortages in specific geographical areas of the state yet with adequate numbers, or an abundance of dentists in other areas; 2) 25 per cent of the total population has fluoride in the water, and this will increase in time; 3) Dentists are just now beginning to practice true primary preventive dentistry. It may be conjectured at this point that the dentist *not* practicing primary preventive dentistry is the one with the greatest number of vacancies in his appointment book. Of course, this office type preventive program requires additional auxiliary personnel; hence, the need for more auxiliary training which is being increased and conducive to the future dental needs of the people of our state.

The other considerations are: 1) There will be a greater demand for dental services, through the education of the public, by our newly adopted Statewide Preventive Dentistry Program and; 2) Third party insurance plans and inevitable National Insurance Programs; hence the need and demand for dental services by dentists and auxiliaries.

Let us now project other thoughts for the future with prevention in action and third party payments. Will the dental education curriculum require continual revision with these possibilities and realities in mind? 1) The

desire and possible provision for Orthodontic treatment will require more Orthodontists. Certainly there is little that can be done towards prevention of hereditary problems in this area at the present time. Although, expanded duties of auxiliaries would expedite delivery. It is assumed that curricular changes would engage training many in elementary Orthodontic procedures and; 2) The need for Endodontists and Periodontists would diminish as curricular changes would permit training in the vast number of those procedures, and to a greater competency level.

Also, let us consider the national trends towards prevention of trauma in sports and requirements for safety equipment on motor vehicles.

Prevention and materials research technology may well emphasize greater training in many areas of dental education and less training in others.

Lastly, and most important let us look at North Carolina as an attractive environment in which to practice: 1) North Carolina offers the mountains, the seashore, the wealthy and fertile rural environment and, growing prosperous urban centers that are attempting to control pollution, as exists in many other states; 2) The State Board of Dental Examiners failure rate is known to be low. The Board is one known to be fair and dedicated to examination as to competency, rather than as an agency to control dentist population. For these ethical and moral standards we are proud and; 3) The income level of dentists in North Carolina is known to be high. These facts are common knowledge.

Are we in a dilemma? I think not, though careful thought to the future must be given. We have the opportunity to motivate and provide the greatest dental health to our citizens more than any state in the nation. *AND THAT WE SHALL DO.—RJS*

White Appointed Dean



Dr. Raymond P. White, Jr. became the third Dean of the School of Dentistry, at the University of North Carolina on July 1, 1974.

Dr. White was graduated from the Medical College of Virginia with a D.D.S. degree and a Ph.D. degree in Anatomy.

He rose from assistant professor to Chairman of the Department of Oral Surgery at the University of Kentucky.

He was Professor of Oral Surgery and Assistant Dean for Administration at Virginia Commonwealth University (Medical College of Virginia) before accepting the University of North Carolina position.

Dr. White is a Diplomate of the American Board of Oral Surgeons and presently serves on their Advisory Committee. He has published widely and he is a popular lecturer. He has received honors in Leadership, Scholarship, Teaching, and Research.

The Whites will live at 1506 Vefma Road, Chapel Hill, North Carolina. They have a daughter and son, ages 11 and 8.

New Needles Among the Pines

This is the theme for the 119th Annual Session of the North Carolina Dental Society to be held in Pinehurst May 11, 12, 13 and 14, 1975.

HIGHLIGHTS OF THE PROGRAM

Monday A.M., Dr. Frank Jerobi
Partial Dentures

Monday P.M., May 12, Mr. Manheim Shapiro
Insight Development for Dentist-Patient
Relationship

Tuesday A.M., May 13, Mr. Shapiro

Tuesday P.M., May 13, Dr. Phillip Toyama
Acupuncture

Wednesday A.M., May 14, Dr. Henry V. Murray
Restorative Procedures for Endodontically
Treated Teeth

General Arrangements Chairman—Dr. Keith Bently
Program Chairman—Dr. Julian Rogers



James W. Bawden, D.D.S.; Ph.D.*

GUEST EDITORIAL



This Matter of Doing Research

In the last decade a new dimension of responsibility has been thrust upon many of our dental schools. They have been asked to join, in a true sense, the academic community, and to share in the effort which seeks new knowledge through scientific investigation. A few of our dental schools have been involved in such activities in a significant way for many years. Most of them have not. Certainly, here at the University of North Carolina School of Dentistry we have evolved from an institution with a minimal research program to one which sponsors a major investigative effort which has achieved national and international recognition. The change has occurred because society has come to expect such activity from health education schools and it has made the funds available to mount the effort. The dental schools themselves have long desired access to the resources necessary to pursue vigorous and meaningful research in order that they might fulfill their obligation to society and assume their proper role in the university community.

Most dentists graduated before this change in the scope and activities of dental schools occurred. It is difficult to understand the profound effect the development of a sizeable and thriving research program can have on an institution of this kind. It makes empiricism and conjecture unacceptable as the basis of decision making, and it holds everyone's feet to the fire in documenting their statements. It produces a student who requires and questions rather than passively accepting information provided him. These are most certainly changes to be applauded.

Research is interesting business. There are a number of rules that apply and are enforced in an unrelenting fashion. The research community operates under the

most stringent peer review mechanism imaginable. The investigator who conducts research without a sound protocol, guarantees of objectivity and validity, or who might misrepresent or extrapolate his findings will be discredited the first time he publishes or presents information with those deficiencies. Anyone who has given a paper at the Federation Meetings or at the International Association of Dental Research knows that he will be subjected to withering criticism if his research is not sound. A publication which is not of good quality is guaranteed to generate negative responses and will be publicly rejected. The person who does poor research cannot compete successfully for funds to continue his efforts. He is simply put out of business. The rules are well defined, the process insures objectivity, and there is constant scrutiny of the process as well as the results.

A second point to be made about research is that one cannot always predict where it will lead or how long it will take. If the investigator knew all the answers before he started, he wouldn't conduct the project in the first place. A protocol can be defined in detail and a schedule set out. However, in the course of the project unexpected findings may occur, or new opportunities arise, which require departure from the original schedule and, perhaps, adjustment in the direction of the program. This is part of the fascination of doing research. It is much the same as a dentist who begins a restorative procedure with reasonable confidence that he knows precisely how he is going to do it and how long it is going to take. But, he knows that, in a certain number of cases, he will run on to something he did not expect and must alter his approach, and that it might take longer than he predicted.

(Continued on page 13)

* Former Dean, School of Dentistry, University of North Carolina.

Continuing Education

UNIVERSITY OF NORTH CAROLINA SCHOOL OF DENTISTRY CONTINUING EDUCATION COURSES

August 16

Four Handed Dentistry
Dr. Doug Strickland
Tuition—Dentists, \$75.00
Auxiliaries, \$25.00

August 24

The Paper Doctor
Dr. C. E. Crandell
Tuition—\$50.00

September 13-15

Intra-Oral Radiographic-Paralleling
Techniques
Dr. John Preece
Tuition—\$65.00

September 28-29

Essential Radiographic Interpretation
and Oral Pathology
Drs. Burkes and Preece (Oral Diagnosis)
Tuition—\$125.00

October 18

Esthetic Considerations of Porcelain
Restorations
Dr. Forest Irons (Fixed Prosthodontics)
Tuition—\$80.00

November 13-15

Patient Management
Faculty and Staff, Department of Oral
Surgery
Tuition—\$150.00

December 4-5

Current Concepts in Periodontics
Staff, Department of Periodontics
Tuition—\$125.00

December 6

Dental Seminar Day
Advances in Pedodontics for General
Dentists
Dr. Spencer Frankl, Boston

December 13

Acid Etch Technique for Resins
Operative Faculty
Tuition—\$60.00

December 13-15

Intra-Oral Radiographic Paralleling
Techniques
Dr. John Preece
Tuition—\$65.00

Virginia Commonwealth University
Medical College of Virginia
School of Dentistry
520 N. Twelfth Street
Richmond, Virginia 23298

1974-1975

October 9-10

Endodontics: Three Phase Program
Staff, Department of Endodontics,
VCU-MCV
Medical College of Virginia
Tuition—\$200.00

October 12

Removable Partial Denture Prosthodontics
Dr. Dewey H. Bell, Jr., Dr. Frederick J. Finnegan, and Dr. John E. Ward, VCU-MCV
Medical College of Virginia
Tuition—\$50.00

October 17

Oral Medicine in the Practice of Dentistry
Dr. Abram I. Chasens, Fairleigh Dickinson
Holiday Inn-Downtown, Richmond,
Virginia
Tuition—\$75.00

October 18-21

Occlusion Study Group: Parts I and II
Dr. Carl G. Wirth, VCU-MCV
Medical College of Virginia
Tuition—\$225.00
Enrollment limited to 20

October 19

Myofunctional Therapy
Ilene R. Biller, Loyola University
Medical College of Virginia
Tuition—\$50.00

October 31

Endodontics: Three Phase Program
Staff, Department of Endodontics,
VCU-MCV
Old Dominion University
Norfolk, Virginia
Tuition—\$200.00

November 2

Endodontics: Three Phase Program
Staff, Department of Endodontics,
VCU-MCV
Virginia Western Community College
Salem, Virginia
Tuition—\$200.00

November 7

Endodontics: Three Phase Program
Staff, Department of Endodontics,
VCU-MCV
University of Virginia
Charlottesville, Virginia
Tuition—\$200.00

November 19 and December 10

Endodontics: Three Phase Program
Staff, Department of Endodontics,
VCU-MCV
Medical College of Virginia
Tuition—\$200.00

December 11-12

Periodontics in General Practice
Staff, Department of Periodontics,
VCU-MCV
Old Dominion University, Norfolk,
Virginia
Tuition—\$150.00
Enrollment limited to 8

December 14-15

Preprosthetic Surgery
Dr. H. David Hall, Dr. Elmer Bear,
Dr. Raymond P. White, and Dr. Edwin Joy
Medical College of Virginia
Tuition—\$75.00

December 20

Changing Prosthodontic Concepts
Dr. Allan A. Brewer
Holiday Inn-Downtown, Richmond,
Virginia
Tuition—\$75.00

January 18

Development, Composition, and Pre-
vention of Dental Plaque
Dr. Harald Loe, University of Michigan
Medical College of Virginia
Tuition—\$75.00

February 7

Crown and Bridge Can Be Fun
Dr. J. Robert Eshelman and Dr.
Thomas R. Hudson, VCU-MCV
American House, Petersburg, Virginia
Tuition—\$50.00

February 8

Rubber Dam Application and Amal-
gam Polishing Procedures for Den-
tal Auxiliaries
Evelyn Oldsen and Jan Line
Medical College of Virginia
Tuition—\$25.00
Enrollment limited to 16



PRESIDENT'S REPORT

Middle Class Morality

Are you a victim of middle class morality, or as sometimes called by many, THE WORK ETHIC? Do you believe that each person in his own right, should make his own way in life for himself and his family, if that falls within his capability? More specifically, do you believe that each person who is physically and mentally capable should work for a living and provide his own necessities for life? Still more definitive, do you believe that individuals should contribute at least a portion toward the cost of their own health care, no matter how small the amount?

If your answer to these questions is yes, then you are definitely infected with middle class morality. Further, you should know that in many circles, these values which have been so typically American for every generation until the present time, are being seriously questioned by many powerful people in and out of government.

You would be asked if contributing a portion of the cost of your own health care makes you an individual of high moral character, would not contributing more money make you even more moral?

We are told that a national health insurance program that includes the mechanisms of deductibles and co-insurance to control cost, is an effort to impose middle class morality on poorer Americans. The answer to this, of course, is that the planners feel it is infinitely more moral to dip their sticky little fingers into middle class pocketbooks to pay for nationalized health programs. And so the argument is joined—the great debate begins on national health insurance.

It is difficult to understand why a health care system that has been far and away, the most innovative in the world, is to be discarded. The United States, has the extraordinary skills to provide extraordinary health care; care that is available nowhere else. The rest of the world recognizes this fact. The incentive system must remain if leadership is to be preserved. It is indeed unfortunate that the people of this country have only their own standards of excellence in health care for comparison.

Individuals who have had the opportunity to live under both, national health systems, and the private system, express the opinion that in most ways the private system is better. National health insurance encourages mediocrity, impersonalization of services, and long waiting periods for service. The American people will not long tolerate this; they have been used to better service.

Proponents claim that national health insurance will provide better access to the system by the masses. Surely education of the public to give a higher priority to health care than to other goods and services is a more proper and productive function of government. This could be done at a fraction of the cost of health insurance.

American Dental Association policy says in effect that, "we believe that everyone who can pay for health care should pay, and that we consider dental care a necessary part of health care. Any monies spent for dental care under national health insurance programs should be spent first on the children where it will do the most good. Of course, the indigent should continue to receive care."

Note carefully that this still leaves a very large segment of care to the private sector. Our medical brothers will probably not be so fortunate. Dentistry must seek to preserve this portion of private practice at all cost for it is here that we can maintain standards of excellence that nationalized segments must seek to emulate. If dentistry is nationalized completely, this yardstick will be lost forever. God forbid.

In America, dentistry came into existence separate and apart from the profession of medicine. We are, and intend to remain, autonomous. At the present time, the Department of Health, Education, and Welfare, has established Professional Standards Review Organizations throughout the United States. It will be administered under the direction of physicians with dentists only as consultants. We do not like this. Plans at present are for review in institutions only, such as hospitals, etc. We all know that when nationalization of the health industry takes place, that P.S.R.O. activity would be extended into the private office. Subjugation of dentistry, in areas of peer review, to medicine will ultimately be a certainty, unless we work to change the review mechanism now.

Assuming that national health insurance is to become a reality, legislation administered by private insurance carriers and not relying completely on Federal dollars is infinitely more palatable than proposals for health care such as the Kennedy-Mills proposal.

To each of us, America is something special and we like to think we do things differently here. Americans came here originally because they were a freedom loving, independent people. We are a different breed than those people who stayed

(Continued on page 23)

119th ANNUAL SESSION



Coffey get it perkin



Direct Current



Dentistry's man Friday



Humor in Raleigh



Student Church Chirps out



"Next slide please"



Picking pockets



ICD Inductees (the odd couple)



Boles bowls them over



Leaders leaving posts



"Something funny happened in Raleigh today"

"Hi ya, General!"



Quarles quarles with Editor



"No thanks, Darden"

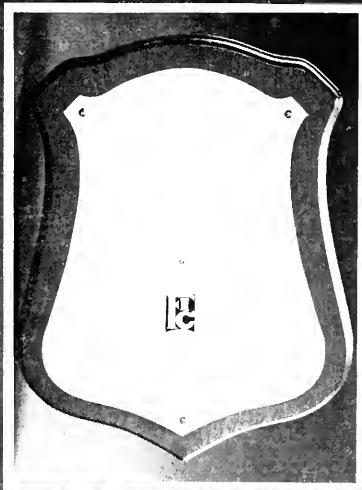
Dentistry's First Lady-Elect with friends



Ellerbee's favorite son



"What now Jolene?"



Thanks for the memory

A Program of Prevention



James B. Hunt, Jr.*

EDITOR'S NOTE: This is an address given at the Annual Banquet of the North Carolina Dental Society, Pinehurst, North Carolina, May 14, 1974.

When I was first invited to speak here, I looked with great interest at your program and thought I might pick up some ideas from it about a speech topic.

I soon found out that not only didn't I understand the items on your agenda, I couldn't pronounce the words. So, I've chosen as a topic something I didn't see on the program.

I want to talk to you tonight about some of the work you are doing that I do understand very clearly, what it means to our state, and why the path you have chosen to follow in this area is so important for us to pursue in other areas. The topic, of course, is your Preventive Dentistry Program for North Carolina.

This program has an interesting genesis, and I believe that in its formulation and execution are some interesting lessons, and some interesting concepts, that we would do well to study very carefully. At the risk of telling you some things that you, more than anyone else, know very well, let me mention a few specifics of this program.

First of all, it is abundantly clear that there is a real, and demonstrated problem in North Carolina in the dental care area. Dental diseases attack nearly everyone.

Look at some of the statistics:

1. North Carolina has over five million people, and about 95 per cent of them are the victims of dental decay alone.
2. Periodontal disease becomes more prevalent with age and accounts for greater loss of teeth than dental decay in older age groups.
3. The people of North Carolina spend \$103.6 million annually for essential dental services.
4. And, most

astounding and most serious, two thirds of our population does not receive any regular dental care.

There are other statistics, and together they show that dental disease takes a tremendous toll in terms of ill health, pain, and cost to the people of our state.

The situation has been described as our largest public health problem, and quite clearly, any program which could achieve better dental health for North Carolinians would be an extremely wise investment.

A wise investment, yes! It is especially wise when you couple the statistics with the knowledge that the number of dentists in North Carolina, per capita, is far below the national average.

Now, what does this mean. It means quite clearly that manpower can not meet the present, or the future, demand for care. It means also we cannot continue to devote attention only to curing present ills. We must turn our attention to the causes of those ills. The solution lies in the concept you have so wisely fostered and the programs you have begun, namely, a massive public program of *prevention*.

Let's look for a moment at the program itself, for it contains the vital ingredients for success and forms the model for what I hope we can do in other areas.

First of all, it utilizes *all* of the resources available to us in this field. It brings together, in a concentrated effort, the work of your Dental Society, the Dental Health Section of the Division of Health Services, the University of North Carolina's School of Dentistry, our Community College System, and our public school system.

Second, it has a clearly defined set of goals: A 25 per cent reduction in dental disease in the population 20 years of age and under, and a 40 per cent reduction in dental disease in the population 10 years of age and under.

Coupled with those goals is the expectation that they can be reached by 1983 if the program is fully implemented.

Finally, there is the program itself, with specific preventive measures in the form of fluoride therapy, and with a massive program of education designed to reach all facets of our population: The student, the parent, the teacher, and the practitioner.

My friends, this is a *good* program, and I commend you for beginning it and for supporting it. It is well thought out, it is being carefully carried out, and it will mean benefits to the people of our state.

The 1973 General Assembly provided funds for the beginning of this preventive dentistry effort. I was especially proud to give this effort my full support, and it will receive my full support in the years ahead.

We all, and particularly the children of our state, owe you a tremendous debt of gratitude.

We owe you a debt of gratitude for this program; and we owe you a debt of gratitude for the concept embodied in this program. What you have done here in the name of dental health can be done, and must be done, in other areas.

The resources of our state, and particularly our govern-

* The Honorable James B. Hunt, Jr., Lieutenant Governor of the Great State of North Carolina.

ment, are not unlimited. We no longer can afford to cure the problems of today by corrective action alone. We need programs of prevention.

Look, for instance, at the young people of our state that we call "exceptional children." These are children with physical and mental handicaps that prevent them from leading full and productive lives. Over 20 separate state agencies are actively working in this field. Close to \$250 million annually is appropriated in an effort to provide treatment and services, and yet, many children in our state still will go without the special care they so desperately need.

Some people who have done extensive research in this area believe that, if we had a comprehensive program of service for exceptional children, we could reach every child in North Carolina with the same amount of money. Under this approach, the total resources of the state would be directed, in a unified fashion, toward providing these children with the care they need.

An important part of the program I have in mind would be its preventive aspect. Proper screening of all children during their early years and identifying the exceptional children is far better than waiting until the problems appear when they enter school. Just as your preventive dentistry program seeks to eliminate the problems, rather than waiting to treat them when they occur.

With our present system, virtually every child in our state has only two chances for early evaluation: 1. when he is born, if in a hospital, and 2. when he enters public school. The years in between are lost, and frequently the child is lost. In many cases, age 5 or 6 is too late to begin effective treatment for certain problems.

It has been estimated that, through the use of an effective and continuous screening process, no exceptional child would enter the first grade without a disability determined and treatment begun.

The system and techniques are different in a program like this than they are in your program, of course, but the concept is the same. It is the concept of prevention.

Look, for instance, at another critical area of concern: that of the use of our land itself. Land use planning is, by its very nature, a controversial subject. Yet, all of us are beginning to realize that our land, our most valuable resource, is a finite thing. Once destroyed, it is, for all practical purposes, gone forever.

An important part of North Carolina's heritage has always been its environment, the natural beauty that makes our state a good place in which to live. However, now, that heritage is being threatened!

As our state grows, our environment is being threatened by uncontrolled development and unplanned growth. This affects not only our land, but also the quality of life for all our people.

Too much of our time and money is spent in cleaning up what we have polluted. Too much of our time and money is spent in restoring what we have destroyed. The time has come for us to direct our intelligence and our energies toward preventing the pollution and destruction of our natural resources.

One of the ways in which we can do this is by implementation of the Land Policy Act that was passed by the 1974 General Assembly. This Act is the beginning of a comprehensive program, a program of building, rather than rebuilding. Only if we act now will we be able to avoid the mistakes that other states have made. These mistakes have

robbed them of their countrysides and turned their cities from jewels into jungles.

Gary, Indiana, can't go back. But we here in North Carolina, through careful planning for the orderly use of our land, still have the chance.

There are many other areas in which your preventive dentistry program can provide us with the inspiration for what we must do in the years ahead. For example, we can't support all of the people on welfare, nor can we put all of the trouble-makers in prisons.

We have to be about finding out why they are there, and what preventive measures we must take to keep these problem areas from growing any larger, and indeed to reduce them to manageable proportions.

We need to be attacking the causes, as you are doing, rather than curing the diseases.

The newsletter for your preventive dental program carries the maxim: "An ounce of prevention is worth a pound of dental treatment."

The concept that you have embraced is one that we can use fully in many other areas. I said we owe you a debt of gratitude for your particular program, and what it means to our state as far as dental health is concerned. This is certainly true. You have shown that this kind of preventive program can succeed, and I know you will continue to make it succeed.

The translation of your inspiration, and this concept, into other areas of critical concern will mean a better life, and a fuller life for all of our people. For this too, I thank you.

BAWDEN

(Continued from page 7)

The third observation is that people who are conducting research, and people who read the results of research and utilize it as they should in their professional activities, cannot be committed to pre-conceived notions about what the results of a given investigation will be. If the project is sound and the process is valid, one must accept the results regardless of whether or not they fit his personal opinion or expectations about the situation. That concept is sometimes a bit hard to swallow. In fact, in the history of our western civilization, there have been times when research activities have been squelched because some people feared that the results of those investigations would not support their opinions about how a biological system, disease process, or some other process or system might work. Such constraints on scientific activity are an anathema to the social and political system of our country.

I am a great believer in the scientific process. Through history it has been the mechanism by which mankind has made his most important scientific and technical advances. It is the means by which the profession of dentistry can make the greatest progress in its effort to serve the public. Now that the profession has a more vigorous and far reaching research effort operating in its educational arm, it must learn to utilize the resource in a proper and effective way. The moral obligation to do so is just as great as the responsibility to render the best possible patient care.

Congress of the United States

House of Representatives

Washington, D.C. 20515

26 April 1974

Dear Dr. Horton:

On March 19, I and six other members of the House Subcommittee on Public Health and Environment, representing both political parties, introduced legislation to provide comprehensive health care coverage for all Americans. This bill, which is virtually identical to the one proposed by the President, is designed to provide Americans of all income levels the ability to obtain comprehensive and high quality health care services. It is designed also to achieve this without socializing or federalizing health care or without damaging what most of us realize is the world's best medical care system.

Briefly, the bill provides a generous benefit package under both 1) the Government Plan and, 2) the Employer Plan. Under the Government assisted plan, which would replace most of Medicaid, coverage would be provided to non-working families with an annual income below \$7,500, all families with income below \$5,000, and persons with a high medical insurance risk. Under the Employer Plan, employers would be required to offer all full-time employees a basic insurance plan, which had been approved by the Secretary of HEW. Benefits required under the plan would include unlimited hospital care; unlimited physician care except regular check-ups for adults; outpatient prescription drugs at their lowest available cost; treatment for mental health, alcoholism and drug abuse problems within certain limits; eye, ear, and dental care for children up to 13; prenatal and well-baby care, family planning services; 100 days of nursing home care; home health services; blood bank and blood products, and other services including x-rays and laboratory tests.

The bill provides catastrophic coverage for all medical costs above \$1,500. There are deductibles and co-insurance provisions to prevent over-utilization of medical services.

To simplify billing procedures, each person choosing to participate in the program (note: *the program is voluntary*—for physicians as well as consumers) would be issued a standard credit card ("Healthcard") to charge medical services. In other words, collections would be done by the insurance companies, thus relieving doctors of this burden.

Unlike some other health insurance proposals, my bill does not rely entirely on federal dollars for its financing. Instead, it builds upon the pluralism of our existing systems of health financing by retaining the commercial insurance carriers, Blue Cross and Blue Shield. This way we can avoid the danger inherent in the completely federalized health care system whereby those federal dollars going into health must compete each year at appropriation time with other federal programs.

In addition, my proposal retains the exercise of individual choice in one's selection of his or her physician. It is not our desire to realize a system of government doctors delivering health services to a randomly assigned patient pool.

In summary, I believe this proposal to be a responsible approach to providing our citizens with adequate health care coverage. Enacted after the Congress considers new legislation for the appropriate planning and development of health care services and facilities, national health insurance will be a logical next step in the evolution of our health care system. Certainly, revisions in various details will occur as we study and consider the measure further. But I am confident that when the debate has ended, we will have developed a plan which gives Americans the protection they so greatly deserve and you, the providers, the satisfaction of working at your chosen profession with a minimum of government interference.

As this and other proposals are debated, I would be grateful for your comments—including your criticism—and for your suggestion of alternatives or perfecting amendments.

Cordially,

RICHARDSON PREYER

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COUNTY

CHARLES W. HORTON, D.D.S.

206 Church Avenue
Telephone 888-6933
HIGH POINT, N. C. 27260

May 7, 1974

The Honorable Richardson Preyer
Representative 6th District of North Carolina
U. S. House of Representatives
Washington, D. C. 20515

Re: N. H. I.

Dear Representative Preyer,

First I wish to compliment you on the extraordinary efforts you have made during your stay in Washington to find out the "mind" of your constituency. Surely, I am most happy that you have sought out my thoughts concerning National Health Insurance. I would begin by saying that I am speaking as an individual and not as President of the North Carolina Dental Society. I do believe that most, not all, dentists feel as I do concerning N. H. I.

I find it difficult to understand why a health care system that has been the most innovative in the world should be replaced. The United States is the medical capital of the world and for any extraordinary procedure, the rest of the world knows where to come and find the skills they need for extraordinary care. The incentive must remain if this is to be preserved.

Individuals who have had the opportunity to live under both National Health Systems and the Private System tell me that the Private System is far better. National Health Insurance encourages mediocrity, impersonalization of services, and waits of up to 6-8 years for elective surgery are common. I do not believe the American people will tolerate this, they have been used to better service. I know the claim for proponents is that access to the system by the mass of people will be easier. My answer to this is that education of the public to give a higher priority to health care than to other goods and services is a more proper and productive function of government.

The last question I would ask that no one has ever answered for me—if we cannot afford health care as individuals, how can we afford health care collectively?

Assuming we are to have National Health Insurance, the policy of the American Dental Association is as follows:

That everyone who can pay for his health care should pay—

That we consider Dental Care a necessary part of health care—

That any monies spent for Dental Care under National Health Insurance programs should be spent on children, where it will do the most good, and the indigent.

With specific reference to your proposals, I must say that it is infinitely more palatable to me than the Kennedy-Mills proposal.

I assume that your mention of unlimited hospital care refers to more than one illness. Certainly, it would not be wise to keep people in hospitals which provide extensive care rather than having them cared for in institutions that provide lesser levels of care whenever practical and possible.

Scope of services seems to be quite adequate. Catastrophic coverage is a truly great need for nearly all Americans.

I believe in deductibles and co-insurance provisions as an aid in controlling cost. I believe that participation and utilization is actually better when individuals contribute a portion of the cost. There is data available to support this position.

Certain ideologies as you know are foreign to American ideals and tradition. You will readily admit I am sure, that most social programs have come to us from foreign shores and are somewhat alien to the image we have of the American who is resourceful and independent. There are those who would say that co-insurance—deductibles, etc., are an effort to impose middle class morality on poorer Americans. To this, I would answer that they do not mind dipping their fingers into middle class pocketbooks to pay for social schemes.

I like the Healthcard system.

In my opinion, financing should not be done through the Social Security system. I prefer also a system in which commercial and not profit insurance carriers would administer the program. I feel they have the necessary claims handling experience to be more effective. I would like to suggest that in administration of dental programs, that Delta Dental Plans would be dentistry's choice to handle claims for dental portions of the program. They are the counterpart to Blue Cross—Blue Shield for dentistry. They understand dentists better and dentists cooperate better with their own creation. Please give this serious consideration since it would be extremely important in the early stages of the program as a contribution to its success.

Individual choice by both patient and doctor are essential. Fee service for service rather than by capitation basis is indicated.

Fees should be usual, customary, and reasonable, and such arbitrary methods such as paying 90% of the usual and customary fee as has been the practice in the North Carolina Medicaid program should not be condoned by government or the professions. In no way can this be considered just.

In America, dentistry has come into existence separate and apart from the profession of medicine. We are, and intend to remain, autonomous. This applies to review mechanisms also. At the present time, the Department of H. E. W. has established P. S. R. O. areas throughout the United States. It will be administered under the direction of physicians with dentists only as consultants. We do not like this. Plans at present are for review in institutions. You and I both know that this will be extended into the private office if N.H.I. comes into effect. I would protest that which amounts to subjugation of one profession to another in areas of peer review. The ideals you have suggested in your summary are noteworthy, and I cannot say that I disagree with any of them.

I know that to each of us, America is something special, and we like to think we do things differently here. Americans came here originally because they were a freedom loving, independent people. They are a different breed than those people who stayed behind in situations which offered more security, but less opportunity. Immigrants still come to this country because America offers the opportunity to each to make a better life for himself—sometimes risks are taken at the expense of absolute security for this reason. I hope the Congress will never lose sight of this attitude in the majority of Americans. This attitude permeates the American's desire to have the best of medical care available, not necessarily the most medical care. There is no doubt that N.H.I. will result in more medical care, but not necessarily the best. If we can not have the best of both worlds, I would suggest that the present system be left alone.

Again, thank you for the opportunity of expressing my ideas.

Thank you for the excellent way in which you are serving.

With kindest regards,

Cordially,

Charles W. Horton, D.D.S.
President, N.C.D.S.

cc: All members of NCDS Executive Committee

Paraformaldehyde-Containing Pastes in Endodontic Therapy

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EDITOR'S NOTE: Letters to the Editor are invited regarding this article.

SOME North Carolina dentists are expressing a renewed interest in endodontic techniques that utilize paraformaldehyde-containing pastes. Current appeal is no doubt related to the ease and expediency offered by these techniques.

Certainly the profession should be interested in methods whereby complex procedures may be performed more efficiently and effectively. When considering the use of such methods, however, one should not lose sight of sound biological principles. A dentist should consider these principles carefully before incorporating any method into his practice—not because there is a "time honored" way of doing things, but because the highly successful conventional endodontic methods presently employed are the result of painstaking basic research.

With this in mind, the Tar Heel Endodontic Association has asked its Committee for Continuing Education to publish an essay on the use of paraformaldehyde-containing pastes. It is hoped that this paper will aid the reader in obtaining a better understanding of those concepts that he should consider before incorporating any endodontic procedure into his practice.

The goals of endodontic therapy are to remove as much necrotic, or potentially necrotic material from the root canal system as possible, and to seal off the root canal system from the periapical tissues and the oral environment. These goals are accomplished by careful and thorough debridement of the canal system, and by filling the canals with a sterile, inert, relatively non-resorbable filling material. Thus, damage to the periapical tissues is kept to a minimum.

Paraformaldehyde-containing pastes may have a place in temporary pulpotomy and temporary deep pulpotomy procedures, but they are not indicated

in total pulpectomy procedures and in the treatment of necrotic canals.

PULPOTOMY. Pulpotomy is not a predictably successful long term treatment. The purpose of pulpotomy is to provide only short range palliative treatment until conditions become more favorable for complete instrumentation and filling of the canals.¹ The remaining pulp tissues in the canals of pulpotomy cases often undergoes necrosis, becomes infected, and a periapical lesion may ensue.

Calcium hydroxide pastes have been advocated for pulpotomy dressings in permanent teeth with incompletely formed apices.¹ While they maintain pulp vitality for an extended period of time, the end result is usually necrosis. Therefore after a calcium hydroxide pulpotomy, definite endodontic therapy should be instituted as soon as the root apices have formed, and hopefully, before calcific degeneration has rendered the canals difficult if not impossible to negotiate.

The application of formocresol to the pulp stumps followed by placement of a paste of zinc oxide, formocresol, and eugenol has been advocated for pulpotomies in primary teeth.² This method has also been used for short-term pulpotomies in adult teeth to provide palliative treatment until conventional endodontic treatment is feasible. Formocresol effectively destroys surface microbial contaminants and produces a fixation of the cut surface of the pulp stump, but does not prevent subsequent necrosis of the "fixed" tissue and the remaining pulp.

ZnOE pastes that contain a small amount of paraformaldehyde have been used as pulpotomy dressings for over 70 years. Oxpura paste,³ PT paste,⁴ and the N2 formulas⁵ all contain formaldehyde or paraformaldehyde and are clinically successful in pulpotomy and deep pulpotomy procedures.

It must be emphasized that, in addition to zinc oxide and eugenol and paraformaldehyde, the N2 formulas contain potentially dangerous materi-

als. The N2 formulas have been modified repeatedly, but the original formulation suggested by Sargent was "Zinc oxide 72 per cent; barium sulfate, 12 per cent; titanium oxide, 6.3 per cent; paraformaldehyde, 4.7 per cent; calcium hydroxide 0.94 per cent; and phenylmercuric borate, 0.16 per cent (remaining 3.9 per cent not specified). Liquid: Eugenol, 92 per cent; rose oil, 8 per cent. N2 Medical (AGSA Root Canal Dressing) Powder: zinc oxide, 8.3 per cent; barium sulfate, 10 per cent; titanium oxide, 75.9 per cent; paraformaldehyde, 4.7 per cent; calcium hydroxide, 0.94 per cent; and phenylmercuric borate, 0.16 per cent. Liquid: Eugenol, 92 per cent; rose oil, 8 per cent."⁵

Chemical analyses have indicated different formulations of N2 notable for the inclusion of variable amounts of lead oxide. These analyses showed a range from 19.5 per cent to 26.9 per cent lead oxide and 0.22 per cent to 6 per cent paraformaldehyde in the N2 powder.⁶ Sargent stated recently that N2 contains 6.5 per cent paraformaldehyde and 12 per cent lead tetroxide.⁷ The presence of lead oxide should preclude the use of N2. The Merck Index lists all lead oxides and lead salts as poisonous.⁸ It is well known that even small amounts of lead can result in brain damage.

While formocresol with zinc oxide and eugenol, PT, and Oxpura are useful for short term pulpotomies, their limitations must be recognized. The use of a preparation containing lead oxide is ethically and legally indefensible.

PULPECTOMY. The most predictably successful procedure in endodontics is total vital pulpectomy. If the apical millimeter of the pulp is left undisturbed and a conventional root canal filling is placed near this point, success can be expected.⁹

Paraformaldehyde-containing pastes are indicated only for short-term pulpotomy and a short-term deep pulpotomy procedures; they have no logical role in total pulpectomy procedures.

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Pastes do have a place in inducing apical root maturation. Calcium hydroxide mixed with a vehicle of camphorated-parachlorphenol,¹⁰ or methyl cellulose and water,¹¹ has been shown to induce apical closure of "blunderbuss" canals. However, this is using a paste as a temporary treatment to obtain more favorable apical anatomy, not using it as a root canal filling. It is not unusual to find on re-opening the canal that these pastes have been diluted by tissue fluids.

Intracanal medications such as metacresyl acetate, camphorated-parachlorphenol, and polyantibiotic pastes are used to keep the environment of the root canal system relatively free of microorganisms following debridement. Intracanal medications are only needed to prevent multiplication of the remaining microorganisms. Therefore, only minimal amounts of intracanal medication are required between the preparation and filling appointments. Since this "holding action" is the only role of these medications, there is no indication for paraformaldehyde-containing pastes in canals that have been prepared for filling.

ROOT CANAL FILLING. Conventional root canal fillings consist of a master core of gutta percha or silver sealed with a luting paste. This luting paste, or root canal sealer, while essential, is also the most resorbable portion of the filling. Hence, long range successful endodontic treatment is predicated on the use of a maximum amount of master core material and a minimum, but necessary amount of sealer.¹² Although endodontists differ as to which sealer is the best, most agree that the more master core material and the less sealer, the better.

While it is true that a sealer will be dissolved and resorbed more rapidly than the customary master core materials, the process is quite slow, provided that the sealer is mixed thickly and compacted against the canal wall by the master core. Indeed, a sealer alone can be a durable root canal filling if surgical access is available so that the sealer can be confined within the canal during insertion.¹³

Sealers usually come in contact with the periapical tissues and are dissolved more readily than master cores. Logic dictates the use of a sealer with the least irritating properties in order to avoid chronic periapical irritation subsequent to filling of the canal. This is why pastes containing tissue-destroying materials such as paraformaldehyde

have no valid place in the definitive filling of a root canal.

Snyder, Seltzer, and Moodnik¹⁴ reported that the N2 paste available at the time of their study did not damage the periapical tissues of dogs any more than a conventional silver cone and Grossman-type sealer control. However, they found that N2 produced inflammation whenever it was extruded into the periapical tissues. Efraimquin and Muruzabal¹⁵ found that small amounts of any sealer caused mild periapical tissue reactions in rats. Large amounts of the more irritating sealers produced necrosis and abscess formation.

The frequent placement of a sealer and gutta percha beyond the confines of the root canal in Schieler's technique¹⁶ and in the Kloroperka technique¹⁷ produces minimal clinical symptoms because the materials used are relatively nonirritating. On the other hand, Ehrmann has reported adverse clinical responses to overfillings with N2.^{6,18}

Many studies have shown that N2 is extremely irritating compared to other root canal filling materials, sealers, and medicaments.¹⁹⁻²³ Only formocresol approaches N2 in tissue-destroying potential.

Seltzer and his co-workers²⁴ have shown conclusively that instrumentation and/or filling beyond the apex is detrimental to healing. They used gutta percha and Grossman's sealer, mild irritants compared to N2.

Formaldehyde in the presence of vital tissue results in non-vital tissue. This is the basis of fixing tissues with formalin for histological examination. The cellular form of the tissue is preserved by the fixation process, but the tissue is nonetheless non-vital. If this tissue is at a pulpotomy level, the surface of the remaining pulp stump will be "fixed," but the underlying tissue will become necrotic.²⁵ Therefore, placing paraformaldehyde at the apex may result in "fixation" followed by necrosis of the periapical tissues. The "sclerotic zone" described by Sargent²⁶ is actually necrotic.²⁷ Since this is a slow, low-grade process, pain is rarely a problem and it may appear that "clinical success" has been achieved.²⁸ However, chronic periapical inflammation is probably present and could become acute at a later time.²⁹

THE SARGENTI METHOD. Advocates of the Sargent method treat vital cases by what is essentially a deep

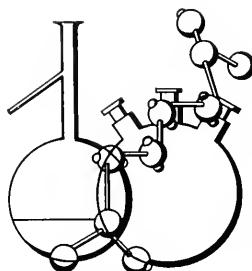
pulpotomy technique.²⁶ While deep pulpotomy is certainly a useful expedient, it cannot be accepted as a definitive treatment. The Sargent method of preparing canals in vital cases usually results in ledging of the canal several millimeters short of the apical constriction.²⁶ Thus, the tooth is condemned to apical surgery if the treatment fails. From the viewpoint of the advocates of the Sargent method this is not a valid criticism, because they maintain that their method is a successful one. Nevertheless, when the "sclerotized zone" of pulp tissue becomes necrotic and the case fails, the only re-treatment option may be surgical, since the apical portion of the canal has probably been ledged.

The Sargent method of placing a paraformaldehyde-containing paste to the apical limit of the root canal in necrotic cases can be expected to result in frequent overfillings and some necrosis should occur almost routinely.

Advocates of the Sargent method use a corticosteroid-antibiotic combination mixed with a tissue-necrosing paste when placing intracanal medication between appointments in necrotic cases.²⁶ The placement of such a combination in the root canal makes it possible for organisms resistant to the antibiotic to infect the periapical bone. The bone is temporarily deprived of its inflammatory defense mechanism because of the antiplogistic action of the corticosteroid. Thus, it would seem that inviting the possibility of a more severe infection by using corticosteroids in root canals is unwise.

Advocates of the Sargent method use the Giromatic handpiece for canal instrumentation.²⁶ One must recognize the limitations of such powered instruments and not risk failure by their improper use in the curved portion of the canal. The Giromatic broaches are made of very flexible steel and can negotiate curved and tortuous canals quickly. However, the Giromatic files and reamers are more rigid and the operator may ledge or perforate the canal with them. The use of hand instruments with careful digital control is the safest method of negotiating tortuous canals and preventing ledges and perforations. O'Connell and Brayton have reported that silicone replicas of root canals prepared by powered instrumentation were not as smooth and uniformly shaped as those prepared by hand instrumentation.³⁰

The Sargent method calls for surgery
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inside dental research

The Esthetic Restoration of Teeth

K. F. Leinfelder, D.D.S., M.S.,* and D. T. Turner, Ph.D.*

WHILE strong metallic teeth are admired in some contemporary civilized societies, the fashion in this country calls for good matching in appearance with natural teeth, at least in visible anterior sites. This esthetic consideration favored the early adoption of silicate cements despite the fact that, in many cases, they suffered too rapid disintegration in the oral fluids. A considerable increase in service life was achieved by introduction of acrylic resins, and currently these materials are themselves being vigorously challenged by composite resins. Any one of a number of these resin materials can give acceptable results in the hands of a skilled practitioner, but in the quest of ever-increasing excellence it is of interest to make carefully controlled clinical comparisons and to seek a rational basis for optimizing properties. The purpose of the present article is to review some of the work bearing on these objectives which is in progress at the University of North Carolina at Chapel Hill. However, before describing this work it is salutary to provide a brief reminder of at least part of the exquisite structure which we are all trying to restore, the dental enamel. In comparison, the current restorative materials appear to be very crude prototypes.

Structure and Properties of Enamel

A rational approach to the restoration of a tooth would be based on a knowledge of its structure. Most restorations involve replacement of

both enamel and dentin. Each of these has a complex structure, but it will suffice here to illustrate this in the case of enamel alone. At the microstructural level clarification of the rods has been achieved by histologists who have succeeded in cutting extremely thin sections of enamel suitable for examination in the electron microscope. The cross-section of the rods is revealed in sections cut parallel to the surface of the tooth (Fig. 1a).¹ There is a consensus of opinion that the rods have a "keyhole" cross-section and that they are packed together so closely that there is little or no space for "interprismatic," i.e. inter-rod, material. The appearance of sections cut through the enamel in other directions are consistent with this interpretation, as exemplified by the longitudinal section shown in Fig. 1b. This figure also reveals a still finer structure which a variety of more detailed studies prove to be crystals. According to one expert the basic units are small hexagonal prisms.² Chemical analyses and crystallographic studies show that the crystals are similar to hydroxyapatite, $\text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2$, although numerous other elements are present in small amounts. Doubtless some of these, such as fluorine, have a disproportionately large influence on the properties of enamel.

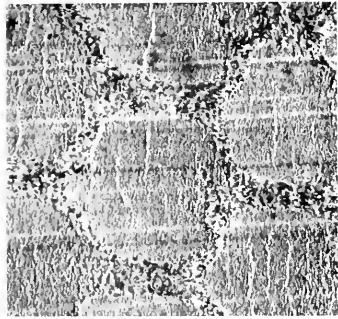
Another constituent of enamel which is believed to be important is organic matter even though this does not make up more than about 2 per cent of the total weight. A general idea of the distribution of the organic matter may be obtained after removal of all the inor-

ganic matter from thin sections (Fig. 1c)³; in this figure a few of the "key-hole" cross-sections have been marked to facilitate their recognition. As would be expected, proteins are important constituents of the organic matter in enamel, but relatively little progress has been made in determining details of their chemical structure. One interesting finding, however, is the identification of an amino acid residue which includes a phosphate group (O-phosphoserine). It has been suggested that this group "plays an important role in the formation of the first solid phase of calcium phosphate deposited in certain mineralized tissues," including enamel.⁴

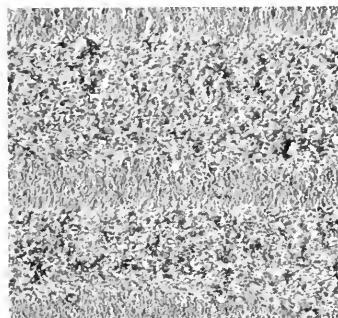
Enough has been said about the microstructural complexities of enamel for the materials scientist to concede his inability to compete in this respect with ameloblasts. However, a rational approach to tooth restoration can still be pursued by passing the problem to the materials engineers. Engineers can dispense with details about microstructure and can design things by an analysis of function and properties. One eminent engineer has summarized the function of teeth rather succinctly: "Teeth are especially worthy of admiration, being capable, with proper maintenance, of cracking nuts for something like forty years."⁵ Physiologists tend to put the matter more soberly by drawing attention to the fact that the main function of enamel is to provide a hard surface which will serve to grind food. It seems that from any point of view the most striking thing about teeth is the hardness of the

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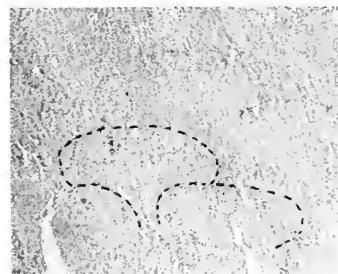
enamel, apatite being in the middle of the scratch-hardness scale between diamond, at one extreme, and talc, at the other. Now a competent engineer would not have selected an apatite to provide a hard surface to be subjected to the high loads encountered in mastication. Because of its brittleness, it



A.



B.



C.

Fig. 1. Electron micrographs of thin sections of enamel. a. Cross-section of prisms (by A. E. Meckel, W. J. Griebsstein and R. J. Neal, ref. 1). (X6000). b. Longitudinal section of prisms (by A. E. Meckel, W. J. Griebstein, and R. J. Neal, ref. 1). (X6000). c. Acid decalcified section of human dental enamel. A very fine network of organic material remains. (by D. B. Scott, V. K. Nygaard, and J. W. Simmeling, ref. 3). (X7000).

would be predicted that an apatite would fracture under unacceptably low tensile loads. Only recently has anybody accepted the formidable difficulty of cutting specimens from enamel and devising a way of gripping them in order to measure tensile strength.⁶ The result obtained, of 1500 psi, indicates an extremely weak material as may be judged by comparison with ordinary window glass which has a tensile strength of about 20,000 psi. It seems safe to predict that teeth made simply of hydroxyapatite would crack and disintegrate very quickly. Apparently there is some feature of the complex microstructure of enamel which prevents this calamity. One possibility which has been suggested is that the progress of a crack, which would result in complete fracture into two pieces in an ordinary crystalline material, is stopped when it comes to a protein interface. A crack-stopping mechanism of this kind could be even more effective in dentin which contains about 18 per cent organic matter.

Engineers can make hard, tough materials. They can toughen glass, make pyroceramics and so on, but not in the oral cavity. If such restrictions are placed on them then they too must concede the superiority of the ameloblasts.

Dental Materials

The field of materials science has developed rapidly, in the last decade and is being taught in the University to all students in the more advanced disciplines (Dentistry and Engineering). Materials may be classified as metals, ceramics (mainly silicates but, more generally, non-metallic inorganic compounds) and organic polymers (very big molecules; the synonym "resin" is becoming archaic). In addition, some combinations of these classes have such remarkable properties that a fourth class has been designated as "composite materials." Perhaps the best known of these is a combination of polymer (resin) and glass fibers to provide "fiberglass" which has found such spectacular applications in boat bodies, fishing rods, and vaulting poles (an objection that fiberglass was so superior that it gave a contestant an unfair advantage was sustained in the 1972 Olympic games). Of course, a spectacular improvement in properties is the exception rather than the rule for mixtures of materials. For example, mixtures of rubber (polymer) and calcium carbonate (ceramic) have been used for many years as flooring com-

pounds but have not been graced with the name of "composite materials." Even mixtures of rubber and carbon black, which give spectacular improvements in abrasion resistance in tire treads, have not received this accolade. Rather, in technical circles, it seems to be the practice to reserve this name for mixtures in which great improvements are achieved through a strong interfacial bonding in a complex microstructure. In the case of fiberglass the bonding is effected by treating the surface of the glass fibers with a chemical (such as a silane) which subsequently forms a strong chemical bond with the polymer. Control of microstructure is possible through fiber orientation. An account of the most recent achievements in control of microstructure is given in a recent article on composite materials,⁸ but the ameloblasts are still unmatched in subtlety.

Dental materials have been developed more modestly, and more secretly, beginning with an initial period of unashamed trial and error in the patient's mouth. Moreover, a major consideration was how to get the material to fit snugly in place in a conservatively prepared cavity. The general methods of materials processing are not suitable for adaptation to clinical conditions and the dental profession must be congratulated for pioneering procedures which are currently finding extended application in other fields of biomedical engineering, such as orthopedics.⁹ The general solution has been to make a doughy mixture from a powder and a liquid which subsequently, after some conveniently controlled working time, sets to a rigid material. This method seems to have been first extended to include polymers by Kluzer who patented the use of mixtures of granular acrylic polymers with liquid monomers in 1937, with the results that clinical uses in restorations were reported in Germany as early as 1938.¹⁰ Clinical experience with these systems came into focus in this country after World War II. The consensus of opinion was that acrylic restorations stood up better than silicates to the oral fluids but were much inferior with respect to incidence of recurrent decay, marginal staining, and discoloration. A major cause of discoloration was found to be due to the use of dimethyl-p-toluidine which, used in conjunction with benzoyl peroxide to initiate polymerization, formed colored reaction products. In current formulations this problem has been solved by replacing

this chemical by p-toluene sulfonic acid.¹¹

The problems of recurrent decay and marginal staining are more complex but both may be due to marginal leakage around restorations which, unlike silicate cements, have no anti-caries action. Evidence of marginal leakage has been demonstrated in the oral cavity by detection of calcium ion migration from calcium hydroxide liners.¹² One factor which can lead to a marginal gap is the marked volume contraction, of about 20 per cent, which occurs when the monomer polymerizes. In a deep restoration this contraction may result in a pulling away from the walls of the cavity. This effect may be reduced by limiting the proportion of monomer. This reduction is limited by the need to retain a sufficiently fluid dough to adapt adequately to the tooth structure. In the bulk flow technique, good adaptation is effected by injecting a mixture rich in monomer into the cavity.¹³ Another, but more time-consuming technique, is to add the polymerizing mixture by a brush-on technique such as that recommended by Nealon.¹⁴ The idea is to achieve increments of polymer which should, step-wise, more readily accommodate shrinkage by distortion at a free surface.

Even when problems due to shrinkage during polymerization have been minimized there remains another factor which can cause a marginal gap. This is the much greater coefficient of thermal expansion of polymers relative to tooth structure. Because of the heat evolved during polymerization the restoration is placed at some temperature, depending on size, above 37°C. Subsequently in the course of eating and drinking the temperature might drop to as low as 0°C and, as a result, the greater contraction of the polymer would tend to pull it away from the wall of the tooth.

Both the problems mentioned above can be reduced by inclusion of particles of ceramic, usually amounting to 70-80 per cent by weight. Ceramics have a coefficient of thermal expansion of the same order of magnitude as tooth structure which is itself mainly a ceramic, i.e., hydroxyapatite. A further improvement in composition can be made by use of a polymer/monomer system which contracts less on polymerization. Bowen has suggested one based on a reaction product of a bis-phenol with glycidyl methacrylate. Further advantages of a different nature, in hardness

and wear, are to be expected from the use of an agent, such as a silane, to bond the ceramic particles to the polymer.¹⁵ Modifications of such mixtures, based on similar principles, have been marketed as "composite" restorative materials, but whether this is justifiable in terms of spectacular improvements in properties, or is little more than salesmanship, remains to be seen.

Clinical Evaluation

However sound the reasoning of the materials designer and however encouraging the results of laboratory tests, the actual circumstances in the patient's mouth are so complex that only clinical evaluations carry authority. Such tests have been made on "composite" materials but have been limited in scope to no more than one or two proprietary materials. Moreover only a limited number of such studies have attempted to make evaluations under carefully controlled conditions. A comprehensive study to meet this need is currently in its third year at UNC. Results obtained after two years were reported at an IADR meeting¹⁶ and are available on microfilm for both posterior and anterior restorations, but here it will suffice to confine attention briefly to the latter.

tion, interfacial staining, and recurrent decay following procedures developed by Ryge.¹⁷ These evaluations require a grade to be given in each category ranging down from "alpha," which corresponds to perfect acceptability. The approach involved a subjective judgment, but the team of four clinicians started with a background in making similar judgments through grading restorative work by students in the Department of Operative Dentistry. They were specially trained to make similar judgments using the Ryge procedures and were intermittently tested during the course of the study for consensus of agreement. A high recall rate for patients was assured by the participation of first and second year dental students.

By the end of two years no recurrent decay was observed. Moreover, the restorations were acceptable in respect to marginal adaptation and interfacial staining, between 84 per cent and 96 per cent receiving the optimal alpha rating. In these three categories there was nothing to choose between the "composites" and the acrylic polymer (Sevriton). On the other hand, differences were observed in respect of color matching and wear (Table 2).

The interim conclusion is that the

TABLE 1. NUMBER OF RESTORATIONS BY NAME AND CLASS

Name	Adaptic	Blendant	Concise	DFR	Sevriton
Manufacturer	Johnson & Johnson	Kerr	3M	Surgident	Amalgamated Dental
Class III	83	77	70	67	77
Class V	12	11	12	14	11

The number of anterior restorations placed in Class III and V cavities is shown in Table 1. All the materials are designated by the manufacturers as "composites" except for Sevriton, which is an acrylic polymer without ceramic particles. The materials were manipulated according to the manufacturers' recommendations. Restorations were placed, under a rubber dam, with "teflon" instruments and lightly tapped or vibrated into position. Sevriton was inserted by a bulk flow method. The restored surface was covered with a "mylar" strip during polymerization. Interproximal surfaces were finally finished with fine flint and garnet disks and with zirconium silicate strips, when desirable.

The restorations were evaluated for color match, wear, marginal adapta-

"composite" materials are somewhat more resistant to wear but are inferior in respect of long term color matching.

Model Systems

Another approach towards development of superior esthetic restorative materials is to analyze some model system in detail. The problem in this case is in striking a balance between a system with practical relevance, with its attendant complexity, and one which is sufficiently simple to yield to analysis. There is already considerable work in progress on "composite" restoratives and the decision made at UNC was to concentrate attention on simpler materials made from mixtures of acrylic polymer powders and monomer. As a first step, attention was concentrated on the way in which microstructure af-

TABLE 2. PERCENT ANTERIOR RESTORATIONS WITH ALPHA RATINGS IN COLOR MATCH AND WEAR AFTER TWO YEARS

Material	Adaptic	Blendant	Concise	DFR	Sevriton
Color Match	43	28	41	49	74
Wear	81	72	77	73	64

fects mechanical strength. For the sake of rapidity, and at the price of forgoing a precise knowledge of the starting materials, investigations began with proprietary materials which are readily available in large amounts for the manufacture and repair of denture bases.

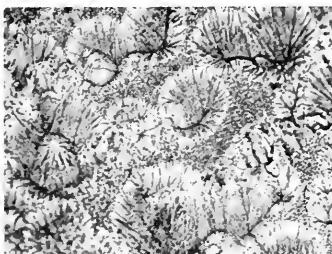


Fig. 2. Fracture surface of a denture base polymer by reflected light (X600) (by R. P. Kusy and D. T. Turner, ref. 18).

The first objective was to characterize microstructure. Previously, in Germany, Helmcke had examined replicas of the surfaces of fractured dental polymers with the electron microscope and was able to show that the grains of powder were carried over into the final product.¹⁸ At UNC it has been shown that the grains can be seen on the fracture surfaces directly by reflected light under the optical microscope (Fig. 2a). In fact the details visible by this technique provide a great deal of information about the fracture process and hence about the strength of the material, but this topic has been documented in detail else-

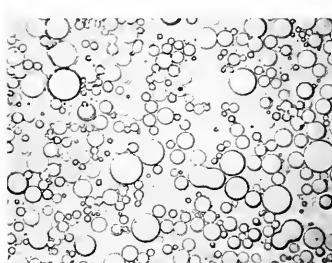


Fig. 3. Polished surface of a denture base polymer etched with nitric acid and viewed by reflected light (X200) (by R. P. Kusy and D. T. Turner, ref. 20).

where.¹⁹ Further work is in progress testing the acceptability of dental microstructures.

Another method for detecting the granular microstructure of dental polymers was discovered, in England, by Smith.²⁰ This involved treatment of a plane surface with fuming nitric acid (an etching technique) followed by microscopic examination by reflected light. At UNC it has been found that, with careful control of conditions, this method can give a very clean picture of the microstructure which can be analyzed to provide quantitative information about the size and distribution of the grains (Fig. 3).²¹

The lesson which emerges from the experiments outlined above is that the unique dental method of making polymer specimens results in a microstructure which is totally absent in specimens as processed by the plastics industry. A more important question, however, is whether this difference affects properties. One important property is tensile strength, and it is known that specimens of dental polymethyl methacrylate (PMMA) only approach from $\frac{1}{2}$ to $\frac{2}{3}$ rds of the value of ordinary PMMA, which is about 10,000 psi. In part, this weakness may be due to gross problems such as the presence of pores, but there is also evidence that mechanical weakness can be caused by poor bonding of the grains in the matrix. The kind of evidence involved is illustrated by comparison of a crack path through a relatively weak dental material (Repair Resin, Caulk; tensile strength—5,000 psi) with one through a stronger material (Lucitone, Caulk; 7,000 psi). In the former case the crack occasionally goes around grains which is indicative of weak bonding (Fig. 4). In contrast, in the stronger material the crack always goes straight through the particles, i.e., there are no preferred paths due to weak bonding. It is believed that this disparity is due mainly to the difference in time to polymerization. The stronger material (Lucitone) is used for making denture bases and polymerizes slowly over a period of many hours; the weaker material (Repair Resin) polymerizes within minutes. Presumably in the

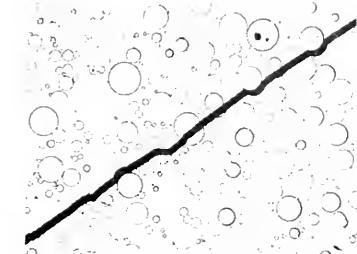


Fig. 4. Crack propagation through Repair Resin (X200) (by R. P. Kusy and D. T. Turner, ref. 21).

latter case the monomer has too little time to penetrate into the grains and so does not establish a strong bond on polymerization.²²

Concluding Remarks

This article has attempted to present an overview of certain aspects of the problem of the esthetic restoration of tooth structure. Brief consideration of the intricate microstructure of enamel has served to put the materials of the present day in perspective as being relatively crude. Perhaps future designs will involve restoration of the dentin and the enamel with separate materials but, at present, this seems too ambitious. Instead, an esthetic appearance is obtained by use of polymers alone or else by "composites" of polymers and particles of ceramics. One deficiency of these materials, and particularly with the "composites," is uncertainty in retention of long term color matching with the tooth structure. In the case of the polymer above (Sevriton) this problem is less severe but wear is more extensive.

Experience with model systems, denture base compounds, provides evidence that mechanical weakness can be caused by weak bonding of the grains originally present in the powder. Moreover, this weakness is more pronounced when polymerization is more rapid. This line of thinking suggests that the poor wear resistance of Sevriton may be due to a similar cause. Research into this possibility has begun with the hope of developing esthetic restorative materials with good properties of both long term color matching and wear resistance.

One advantage of the above program is that it has brought together people with different approaches. It is hoped, further, that it will serve to stimulate wider discussion of this important

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Ectopic Geographic Tongue

E. Jeff Burkes, D.D.S., M.S.*

ECTOPIC locations of lesions similar in clinical and histologic characteristics to geographic tongue have been rarely described and pictured in the literature. It was not until a report by Cook¹ in 1955 that involvement of dorsal and ventral tongue surfaces, floor of the mouth, soft palate and lower lip with this lesion was emphasized. Since that time there have been additional case reports by Friedman and Baran² (1967), Kuffer, et al.³ (1971), Sapiro and Shklar¹⁰ (1973) and O'Keefe, Braverman and Ohen⁶ (1973) and pictures in the textbook by Mitchell, Standish and Fast⁷. Surveys of geographic tongue have not reported ectopic lesions.^{4,7,8,9} Within the past five years several patients or biopsies of patients with lesions of ectopic geographic tongue have been seen at the University of North Carolina School of Dentistry. These patients had been referred for varying reasons and had previously received diagnosis ranging from erythema multiforme to atypical lichen planus. It wasn't until a patient with the referral diagnosis of "oral ringworm" was seen that our attention was drawn to this unusual condition. After studying the histology in this case of "oral ringworm" and seeking assistance, the diagnosis of ectopic geographic tongue was made. Review of the literature, plus the cases reported here reveal that the ages of the affected patients varied from 9 to 59 years. Of the patients only two were female.

The paucity of reported cases of ectopic geographic tongue would seem to belie the true incidence of the condition. Perhaps since it seldom creates symptoms, it is seldom noticed or brought to the attention of the dentist and even more rarely submitted for histologic evaluation.¹¹ The histology available demonstrates many features in common with geographic tongue. The raised border is produced by coalescing intra-epithelial collections of inflammatory cells usually neutrophils (Fig. 1). The remaining epithelium shows acanthosis and parakeratosis. The lamina propria contains variable



Figure 1. Photomicrograph showing dilated vascular channels and intra-epithelial abscesses.

infiltrates of chronic and acute inflammatory cells and dilated thin walled vascular channels extending high into the epithelium. This histology plus their frequent occurrence together would suggest a common but unknown etiology and pathogenesis.

Case I: M.T., a 32 year old female was referred for confirmation of a previously established diagnosis of lichen planus. She reportedly was in good health but admitted to being very nervous. Her only medication was an oral contraceptive pill. She smoked occasionally and rarely used alcohol. She did not routinely use a mouth wash but used a commercial mouth wash preparation when her mouth bothered her. Oral examination revealed ovoid erythematous lesions with partial raised white margins. These lesions were present in the mandibular labial vestibule (Fig. 2), buccal mucosa and ventral surface of the tongue. Although the patient was aware of the lesions, they seldom became symptomatic. Follow-up examinations for five years reveal no significant change in the patient's medical or dental history. The lesions have undergone exacerbation and remission but have not changed in location or size significantly.

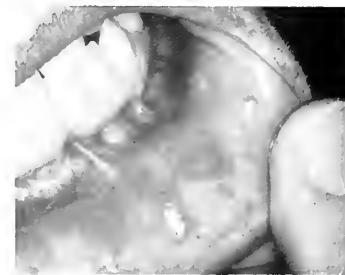


Figure 2. Ectopic geographic tongue lesions in labial mucosa.

Case II: H. M., a 58 year old male was a routine recall patient in the dental hygiene clinic. For the past several years ovoid erythematous lesions with white borders had been noted in the buccal mucosa as well as on the tongue (Fig. 3). He reported good health during that time and had stopped smoking. No other contributory information could be obtained. The clinical diagnosis was ectopic geographic tongue.

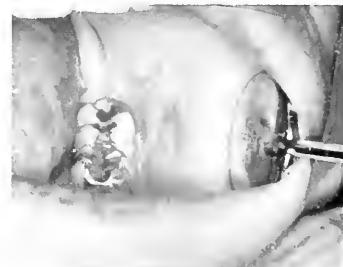


Figure 3. Ectopic geographic tongue lesion in the buccal mucosa.

Discussion

The incidence of geographic tongue in approximately two percent of the population would make this condition one of the more common soft tissue abnormalities encountered in a dental practice. Since the lesions typically have an irregular raised white margin with atrophic lingual papillae in the center, geographic tongue seldom presents a diagnostic problem. Although this condition must be considered along

* Associate Professor, Section of Oral Pathology, U.N.C. School of Dentistry

with several others when a patient complains of a burning tongue, the lesions are usually asymptomatic. Ectopic locations of these same tissue changes however present a much greater diagnostic challenge. Consideration must be given to premalignant disease and to conditions which effect skin and mucous membranes simultaneously such as erythema multiforme and lupus erythematosus. Because these latter conditions demand early effective treatment, they must be separated from ectopic geographic tongue which is not dangerous to the patient and requires no definitive treatment.

The cause of geographic tongue and similar ectopic lesions is not known although psychogenic factors and degenerative change have been proposed. The clinical appearance of these lesions may be easily explained by the finding of small abscesses within the epithelium. These abscesses enlarge and coalesce creating separation and exfoliation of the upper epithelial layers. The depapillated erythematous central areas correspond to locations of thin epithelium over highly vascular connective tissue submucosa.

The course of ectopic geographic tongue is unresolved. From the patients reported, it appears that the condition arises spontaneously and may last from several months to several years. During the course of the disease exacerbations and remissions are to be expected, however, no serious complications or accompanying diseases have been reported.

Summary

Two patients with lesions similar to geographic tongue have been reported. Comparing the paucity of reported cases to the incidence of geographic tongue would seem to belie the true incidence of the condition. It is im-

portant to differentiate this benign condition from ones which would have more dangerous consequences.

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14 Dentists Awarded AFDH Teacher Training Fellowships. Each fellowship includes a stipend of \$6,000, a \$500 allowance for each dependent, and full tuition costs. The fellowship is for one year of study at the graduate level and may be renewed for a second year if the recipient is engaged in a two year course. Most recipients use the fellowship to take a two-year program leading to a master's degree.

One of this year's recipients is David J. Hall, D.D.S., orthodontics, University of North Carolina, sponsored by the American Dental Trade Association.

MIDDLE CLASS MORALITY

(Continued from page 9)

behind in situations which offered more security but less opportunity. Immigrants still come to this country because America offers greater opportunity to each to make a better life for himself. Sometimes risks are taken at the expense of absolute security for this reason. Congress should never lose sight of this attitude in the majority of Americans.

This attitude permeates the American desire to have the best health care available, not necessarily the most health care. There is no doubt that national health insurance will result in more medical care, but not necessarily the best. If we cannot have the best of both worlds, the American public should demand that the present system be left alone.

We are told that nationalization will come in the near future. Prepare yourselves.

CHARLES W. HORTON, D.D.S.

WILLARD PERRY, C.D.T.

VIC EULISS, C.D.T.

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BOX 86

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Pulpal Degeneration Associated With Drainage By Way of the Incisive Canal and Gingival Crevice

Richard E. Anglin, D.D.S.*
Earl V. Patterson III, D.D.S.†

PURULENT exudate reaches for the surface along the route of least resistance.¹ Simring and Goldberg have stated that this purulence may follow along the tooth root and cause a retrograde periodontitis.²

Differentiation between pulpal and periodontal problems is usually determined by means of the patient's history, radiographic findings, and clinical tests. However, cases presenting with continuity between the gingival margin and the periapical region may make definitive diagnosis difficult.

In the maxillary anterior region additional problems arise due to unusual anatomy that may be found in this area. Developmental grooves on



Fig. 3. Occlusal radiograph at time of initial examination in Oral Surgery showing no evidence of incisive canal cyst.

the distolingual of maxillary laterals and occasionally on maxillary centrals may begin at the lingual pit and extend subgingivally, predisposing to deep pocketing with vertical bone loss.³ Also, incisive canal cysts can become infected resulting in a swelling located lingual to the maxillary centrals with resulting fluid drainage.

Drainage of pulpal origin by way of the incisive canal and lingual gingival crevice has not been reported.

A 36 year old male was first examined in the oral surgery clinic on September 13, 1973. At that time the incisive papilla was symmetrically swollen 1 cm x 1½ cm, the patient was in pain, and the area was fluctuant (Fig. 1). He reported that the incisal edge of tooth No. 8 had been broken in a swimming pool accident five years previously (Fig. 2) and a porcelain jacket had been fabricated. An occlusal radiograph showed no evidence of an incisive canal cyst (Fig. 3). Incision and drainage was performed and the patient was placed on antibiotics and analgesics and referred to endodontics for evaluation.

The patient was seen in endodontics on September 20, 1973. Purulent exudate from the lingual gingival crevice of No. 8 was present along with generalized pain and swelling of the incisive papilla. A radiograph taken with a gutta percha cone inserted in the drainage point to a depth of 10 mm subgingivally showed that the cone did not approximate the apex of No. 8 or No. 9. The radiograph also showed

that the lamina dura of both teeth appeared to be intact (Fig. 4). Teeth No. 7, No. 9, and No. 10 gave normal EPT readings. These findings negated sacrifice of the porcelain jacket by doing a test cavity at this time. The patient was referred to periodontics to determine the possibility of a periodontal abscess. At that time curettage and irrigation were performed and the patient was rescheduled for flap procedure to assess the extent of lingual bone loss or the presence of an incisive canal cyst.



Fig. 4. Radiograph taken with gutta percha cone inserted into gingival sulcus of M-L line angle of #8. Note that it does not approximate the apex of either tooth.

On September 27, 1973, the flap procedure revealed normal bone around the lingual of the teeth, but a fairly large incisive canal was present very closely approximating the roots of the central incisors (Fig. 5), and this was approximately where the gutta percha cone had been placed. No communication could be found between the incisive canal and the roots of the teeth and nothing resembled cystic material was found inside the canal. Healing of the flap was complicated by hematoma formation and purulent drainage persisted (Fig. 6).

On October 11, 1973, a test cavity was performed in endodontics. The pa-

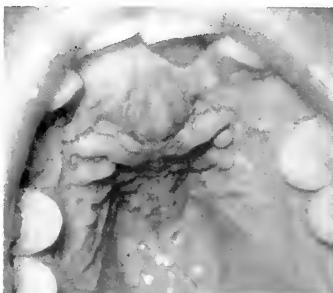


Fig. 1. Enlarged incisive papilla area as seen at time of initial examination in Oral Surgery.



Fig. 2. Radiograph of teeth #8 and #9 at time of fracture of #8 five years previously.

* Graduate Division of Endodontics
† Graduate Division of Periodontics



Fig. 5. Photograph taken at time of periodontal surgery demonstrating relatively large incisive canal with close proximity to the roots of #8 and #9.



Fig. 6. Photograph demonstrating hematoma formation and persistent drainage one week after periodontal surgery.



Fig. 7. Radiograph at time of filling of root canal with gutta percha and Kloroperka sealer.

tient felt no discomfort until the bur reached the level of the CEJ, and then the discomfort was minor. Intrapulpal anesthesia was then used as a precaution against the possibility of pain deeper in the root canal. The pulp chamber and canal were somewhat recessed and the pulp tissue present was fibrous in nature with almost no hemorrhage present.

Endodontic therapy was completed

on November 11, 1973, when the canal was filled using gutta percha and Kloroperka sealer (Fig. 7).



Fig. 8. Photograph (viewed in mirror) of incisive papilla area at 3 month recall. Note lack of engorgement.



Fig. 9. Radiograph at 3 month recall after post crown completed.

At the three month recall, probing on the lingual of No. 8 revealed a 3 mm pocket depth, indicating gingival reattachment. The soft tissue was normal in appearance (Fig. 8) and no discomfort or swelling had been present since the day the pulp was removed. A periapical radiograph showed no evidence of any pathologic condition (Fig. 9).

Summary

A case of pulpal degeneration with apparent drainage by way of the incisive canal and lingual gingival sulcus is presented. This finding is unusual since there are no previous reports of this condition in the literature. The lesion was treated successfully by routine endodontic therapy.

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THE ESTHETIC RESTORATION OF TEETH

(Continued from page 21)

problem among the dentists of North Carolina.

Acknowledgments

This investigation was supported by USPHS Research Grant Number DE 02668 from the National Institute of Dental Research and, in part, by a General Research Grant No. RR 5333 from the General Research Support Branch of the National Institute of Health.

We are grateful to Drs. David B. Scott, V. K. Nygaard, and J. W. Simmink, School of Dentistry, Case Western Reserve University, Cleveland, Ohio, for allowing us to use their unpublished results (Fig. 1c).

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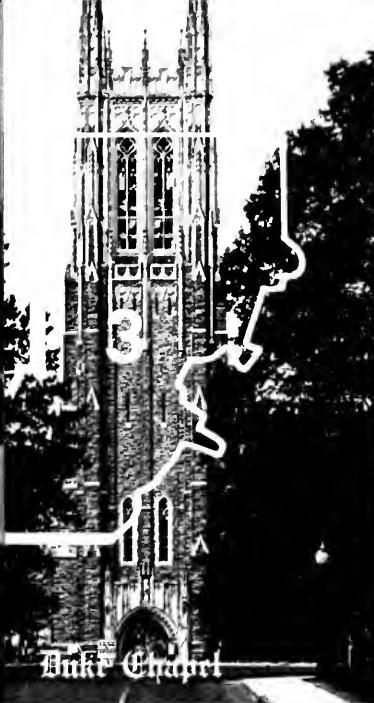
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Green Park Inn
Blowing Rock, N. C.
September 27, 28, 29



Downtowner Motor Inn
Charlotte, N. C.
September 6, 7, 8





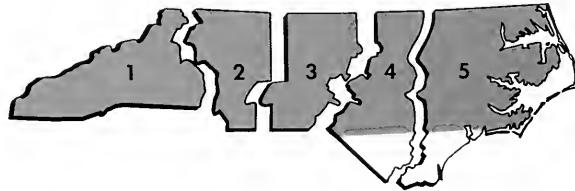
Durham Hotel-Motel
October 5, 6, 7



Wilmington Hilton, September 12, 13, 14



Bordeaux Motor Inn
Fayetteville, N. C.
October 10, 11, 12





first district news

Hicks Hamrick, Jr., D.D.S., Editor



Dr. Benjamin R. Baker



Dr. Cecil R. Lupton



Dr. David P. Dobson

Dr. Baker is a graduate of Guilford College. He received D.D.S. and M.S. degrees from the University of North Carolina School of Dentistry. For the past six years he has been in private practice. He is a member of the American Dental Association, American Academy of Pedodontics, North Carolina Society of Pedodontics, Who's Who South. He has presented clinics and seminars throughout the United States in Pedodontics and Dental Auxiliary utilization and practice management. He is a member of the Continuing Education Faculty, School of Dentistry, University of Southern California.

SYNOPSIS

Emphasis will be on Pedodontics. Management of traumatized anterior teeth. Restoration of fractured anterior teeth using conventional and acid etch technique. Space maintenance in the primary and mixed dentition, habit appliances and restorative dentistry for the child patient.

Friday, September 27

12:00- 5:30 Registration
12:00 Golf Tournament
6:00- 7:30 Cocktail Party
7:30 Dinner
9:00- 1:00 Dance

Dr. Lupton is a 1954 graduate of the University of North Carolina School of Dentistry. He began a full time teaching career after four years in private practice, and has been a member of the School of Dentistry for 16 years. His present position is Associate Professor of Oral Surgery. He is a member of the Southeastern Society of Oral Surgeons, American Society of Oral Surgeons, and North Carolina Society of Oral Surgeons. Dr. Lupton's research and educational and practice experiences have prepared him well as a clinician.

Dr. Lupton's presentation will encompass Indications and Contraindications for Removal of Impacted Teeth and Surgical Procedure.

Saturday, September 28

8:00- 9:30	Executive Committee Breakfast
9:00-12:00	Registration
9:00-10:30	Table Clinics
10:30-12:30	Dr. Lupton
12:30	Lunch
2:00- 5:00	Dr. Dobson
6:00- 7:00	Cocktail party and reception for State Officers
7:00	Dinner
8:30	Annual Business Meeting

Dr. David P. Dobson, D.D.S., M.S., Diplomate, American Board of Prosthodontics, has been Professor and Chairman of the Department of Removable Prosthodontics at the University of North Carolina School of Dentistry since 1956.

Dr. Dobson's subject will be Removable Prosthodontics Without Gimmicks.

Dr. Dobson believes that many practitioners are prone to stray from proven methods of Removable Prosthodontic service and are therefore subject to gimmick techniques presented to the profession by some clinicians. His presentation will be based on twenty-nine years of clinical observation as a prosthodontic specialist.

Sunday, September 29

8:00	Breakfast
9:00-12:00	Registration
9:00-12:00	Dr. Baker
1:00- 2:30	Luncheon with auxiliary and Final Session

Green Park Inn—Blowing Rock

North Carolina

September 27, 28, 29, 1974



second district news

Donald D. Culp, D.D.S., Editor



Charles M. Heartwell, Jr.

Graduated Medical College of Virginia School of Dentistry, 1932, Private Practice, 8 years.

United States Navy Dental Corps 20 years and retired 1961 as a Captain. Full-time faculty staff member Medical College of Virginia School of Dentistry, 1961-1974 with academic rank of professor and in 1970 became Director of Maxillofacial Prosthodontics, Division of Oral Surgery. He is a Diplomate of the American Board of Prosthodontics and the American College of Prosthodontics. He is a Fellow of the American College of Dentists, Richmond Dental Society, and a member of Omicron Kappa Upsilon.

At present he is a consultant for Virginia Commonwealth University Medical College of Virginia School of Dentistry and McQuire Veterans Administration Hospital.

Friday, September 6, 1974

- 10:00 Registration and exhibits
1:00- 4:30 Dr. Charles Heartwell "Oral Anatomy & Physiology Relating to Full Dentures"
5:00 Business meeting
6:30 Cocktail party
7:30 Banquet

Mr. Harvey Sarner speaking on third party intervention in the immediate future

9:00- 1:00 Dance

Saturday, September 7, 1974

- 9:00-12:15 Mr. Sarner "Managing Your Practice & Your Money"



Harvey Sarner

Harvey Sarner B.S. and LL.B. University of Minnesota, Attorney in Private Practice and President, Sarner and Associates

Editor Sarner & Associates *Doctor's Newsletter*
Instructor in Dental Jurisprudence Indiana University
Staff Attorney ADA 1961-1971
Consultant ADA Council on Insurance
Associate Professor Jurisprudence Northwestern University Dental School

Author Various Articles in Dental & Legal Journals
Author of Books, *Dental Jurisprudence*, *The Business Management of a Dental Practice*, *Law for the Nurse*, *The Business Management of a Small Animal Hospital*, *Insurance for the Doctor*.

Saturday, September 7, 1974

- 12:15- 2:00 Business Luncheon
2:00- 5:00 Mr. Sarner
6:30 Cocktail party
7:30 Buffet
8:30 Monte Carlo Night

Sunday, September 8, 1974

- 8:00 New members breakfast
9:30 Projected clinics
10:30 Donald Meyer, D.D.S., Speaking on unions in dentistry's immediate future
12:30 Brunch and learn



third district news

Jon W. Couch, D.D.S., Editor

Fall Program

The 1974 Third District Dental Society of North Carolina will hold its 1974 meeting in Durham, N. C. on October 5, 6, and 7th, 1974 at the Durham Hotel-Motel. Third District hygienists and assistant societies will also meet. A program has been organized for the Dental Auxiliary.

The scientific program will emphasize the Vitreous Carbon Tooth-Root Replacement System. It is designed to acquaint the practicing dentist with the development and properties of the vitreous carbon material and to teach him indications and techniques for surgically placing the tooth-root system and restoring them to function.

A continuing education program will be presented by the members of the faculty from the University of North Carolina. A table clinic program is planned to include the laboratory technicians, hygienists, and assistants.



Dr. Roland M. Meffert received his D.D.S. degree from Marquette University and graduate training in Periodontics at the University of Texas in Houston. Currently, Dr. Meffert is a Colonel, U.S.A.F. Dental Corp., Chairman, Department of Periodontics, Wilford Hall, U.S.A.F. Medical Center, Lackland Air Force Base, Texas. He is also Special Consultant in Periodontics to the Surgeon General, U.S.A.F., Regional and Area Military Consultant in Periodontics and Clinical Professor, Department of Oral Medicine and Periodontics, University of Texas Dental Branch, Houston, Texas. Dr. Meffert has published and lectured extensively on vitreous carbon implants.

Saturday, October 5

- | | |
|------------|-----------------------|
| 11:00 a.m. | Register |
| 12:15 p.m. | Bus to Duke game |
| 6:00 p.m. | Bus to Dinner Theater |
| 8:30 p.m. | Dinner Theater |

Sunday, October 6

- | | |
|------------|--|
| 8:30 a.m. | Register |
| 9:00-12:00 | Presentations by Faculty Members, U.N.C. School of Dentistry
Dr. Gary Dilley: Pulpectomies in Non-Vital Primary Teeth.
Dr. Forest Irons: Fixed Restorative Esthetics.
Mr. Robert McCabe: Interdisciplinary Treatment of the Cleft Palate Patient: The Team Approach.
Dr. Gary Smiley: Interesting Aspects of the Cleft Palate Problem.
Dr. Matt Wood: Treatment of Patients with Maxillo-Facial Defects.
Dr. Ernest Small: What's New in Orthognathic Surgery. |
| 12:00-1:30 | New Member Orientation Luncheon |
| 1:30-3:00 | Vitreous Carbon Implants
Col. Roland M. Meffert |
| 3:00-3:15 | Business Session, General Session, Election of Officers |
| 3:30-5:00 | Table Clinics |
| 6:30-8:00 | Social |
| 8:00-9:30 | Banquet |
| 9:30 p.m. | Entertainment |

Monday, October 7

- | | |
|------------|---|
| 8:30 a.m. | Register |
| 9:00-12:00 | Vitreous Carbon Implants
Col. Roland M. Meffert |
| 12:00-2:00 | Luncheon honoring new members, business meeting |
| 2:00-3:30 | Question and Answer
Vitreous Carbon Implants
Col. Roland M. Meffert |



fourth district news

Vonnie B. Smith, D.D.S., Editor



Dr. Gerald Courtade

Dr. Courtade practices in New York City and is on the faculty of the School of Dentistry, Louisiana State University. He is Adjunct Professor in Dentistry, Division of Prosthodontics, School of Dental and Oral Surgery, Columbia University. Guest Lecturer, Division of Crown and Bridge, Faculty of Northwestern University Dental School, Chicago, Illinois. He is a member of the visiting faculty of the L. D. Pankey Institute and Advanced Dental Education. Dr. Courtade is co-author of the textbook "Pins in Restorative Dentistry" which has also been released in a Japanese translation in Tokyo and will soon be available in a Spanish translation in Buenos Aires, Argentina. He is a member of the American Academy of Restorative Dentistry and the American Prosthodontic Society. Also, he is past president of the New York Academy of Dentistry.

A NEW FORMAT!

A NEW EMPHASIS!

A NEW FACILITY!

This October eleventh and twelfth, The Fourth District Dental Society will be holding its annual meeting at the beautiful Bordeaux Motor Inn. The Inn and Convention Center, located at 1707 Owen Drive in Fayetteville, is just across the street from Bordeaux Shopping Center.

This year we would like to emphasize the Table and Projected Clinics and The Scientific Session. Larry Williams is again chairing the Clinics Committee. He did an outstanding job last year and we asked him to serve again.

Glenn Bitler, President Elect of the Fourth District, is Program Chairman. Glenn has planned an outstanding Scientific Session.

Dr. Ray Carnevale, Annual Sessions Chairman, is riding herd over this whole affair and is planning something for everyone. There will be an Octoberfest on Friday night and a banquet on Saturday night at which time new members and their wives will be honored. We are also planning a golf tournament and maybe tennis as well.

Please mark your calendar and plan to be with us. Come early as the Registration Desk will be open on Thursday evening.

See you in Fayetteville!

MICHELL W. WALLACE

President

Fourth District Dental Society

PROGRAM

Thursday, October 10, 1974

- 5:30 p.m. Registration Desk opens
8:30 p.m. Executive Committee meeting

Friday, October 11, 1974

- 8:30 a.m. Registration Desk opens
8:30 a.m. Golf and tennis
12:00 Noon New Members Luncheon
1:30 p.m. Table and Projected Clinics
4:00 p.m. First General Session
7:00 p.m. Octoberfest and Entertainment

Saturday, October 12, 1974

- 8:00 a.m. Issues Committee meeting
8:30 a.m. Registration Desk opens
9:00 a.m. Scientific Session—Dr. Gerald Courtade, New York City, N. Y., "Wonderful World of Pins-Updated"
12:30 p.m. Lunch
2:00 p.m. Scientific Session—Dr. Gerald Courtade
5:30 p.m. Second General Session
6:30 p.m. Social Hour
8:00 p.m. Banquet and Entertainment in honor of New Members and their wives

fifth district news

Wayne C. Anderson, D.D.S., Editor

A sincere attempt will be made to determine the need of the individual attendee, and through direct question and answers, deal with the issues that are of concern to those attending, discussing such things as: The matter of motivation as it relates to the dentist, the staff, and the person we call the patient; what common language can be established between the dentist and his staff and the patient as to what a goal is; what objectives are; and how they inter-relate to any accomplishment whether related to preventive procedures or production in the office, or the achievement of various economic objectives that one may establish.

Discussion may include group practice; income distribution; corporate structure; ownership and involvement; the business of dentistry; case presentations; economic arrangements; delegation of duties for auxiliaries in preventive procedures; rehabilitative procedures; the role of a male office manager in a group practice; the general experiences in dentistry as the practice grows; the recruitment of new patient load; and the four P's of a good practice: a Product, a Price, a Place, and Promotion.

Thursday, September 12

- 4:00- Executive Committee Meeting—Board Room
6:00- 9:00 Registration—Main Lobby
9:00- General Session—Ball Room
Call to Order—Dr. David H. Freshwater
Introduction of Guests—Dr. David H. Freshwater
Necrology Service—Dr. Phil Sanders
Minutes of last meeting and Secretary & Treasurer's report—Dr. Garland R. Holmes
Presentation of New Members—Dr. H. L. Keith
Nominating Committee Report—Dr. William E. Kidd
Election of Officers
President's Address—Dr. David H. Freshwater
Adjournment

Friday, September 13

- 7:30- 9:30 Open Forum Breakfast—Garden Room—Dr. James Privette, Chairman
8:00-10:00 Registration—Main Lobby
9:45-12:00 Ball Room C—Dr. Omer Reed
12:15- 1:15 Luncheon—Ball Room A
1:30- 4:30 Dr. Omer Reed
6:00- 7:00 Social Hour—Patio
7:00- 9:00 Luau—Patio
Master of Ceremonies—Dr. Fred Howdy
Invocation—Dr. Darden Eure
9:00-12:00 Dance



Dr. Omer K. Reed

Dr. Omer K. Reed, of Phoenix, Arizona, is a practicing dentist who has used his office as a laboratory to study the doctor-patient relationship over the past 14 years. He received his B.S. and D.D.S. degrees from the University of Minnesota, and has studied extensively on the post-graduate level at the University of Minnesota, at University of Southern California and University of California at Los Angeles, and with selected clinicians. He is on the Board of Directors of Christian Dental Society, on the Board of Directors of the American Society for Preventive Dentistry, is a member of the Federation Dentaire Internationale, the American Dental Association, American Academy of Periodontology, the Western Society of Periodontics. He has lectured before local dental societies, study clubs, Dallas and Chicago Mid-winter clinics.

Saturday, September 14

- 8:30- New Members Breakfast—Dr. H. L. Keith
9:30-11:30 Projected Table Clinics—Dr. George Sutton
11:30-12:30 Final Business Session
Committee Reports
Report on President's Address—Dr. Smitty Jewell
Installation of Officers
Drawing of Door Prizes
Executive Committee Meeting

Items of Interest



NEW OFFICERS OF THE DENTAL FORUM—Left to right: Dr. James Privette, Chairman, Dr. Curtis Bowens, Vice Chairman, Dr. Fred Spraul, Secretary-Treasurer.



NEW OFFICERS OF THE NORTH CAROLINA DENTAL SOCIETY—Left to right: Dr. Ralph Coffey, ADA Delegate, Dr. Charles Horton, President, Dr. R. B. Barden, Secretary-Treasurer, Dr. Harold Maxwell, President-Elect, Dr. Baxter Sapp, Vice-President, Dr. James Harrell, Immediate Past President, Dr. Ed Austin, ADA Delegate.

Quote of the Month. A German medical magazine says life insurance studies show that the husband who kisses his wife every morning before he leaves for work will probably live 5 years longer, earn 20 to 30 per cent more, lose up to 50 per cent less time because of illness, and be involved in fewer automobile accidents than the husband who doesn't. From *Career*.

Boles Receives ICD Award. Dr. Frances Holler Boles is the first lady to receive the International College of Dentists, Student Outstanding Achievement Award. The award was presented at the annual luncheon of the International College of Dentists at Pinehurst, May 13, 1974.

Delta Plan Expresses Appreciation to Foundation. In recognition of the support received from the Dental Foundation of North Carolina, Inc., the Board of Directors of Delta Dental Plan of North Carolina, Inc. at its meeting in Pinehurst, N. C. on May 13, 1974 passed the following resolution:

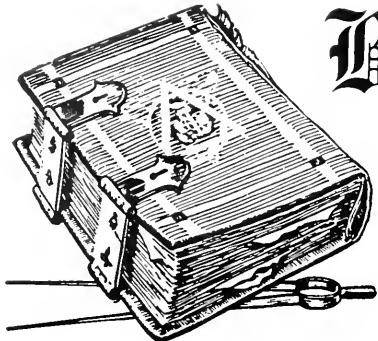
Resolved, that the Board of Directors of Delta Dental Plan of North Carolina, Inc. express to the Dental Foundation of North Carolina, Inc. their deep appreciation of the past financial support received from the Foundation and be it further

Resolved, that such appreciation be expressed to the Foundation through an appropriate letter addressed to its Secretary-Treasurer and that this action be publicized to the membership of the Foundation and the North Carolina Dental Society through publication in the Journal of the North Carolina Dental Society and be it further

Resolved, that an announcement of this action be made to the general membership of the North Carolina Dental Society by its President at the Society's Annual Session in Pinehurst.

First of Hawaiian Islands Adopts Floridation Law. On May 1 a mandatory fluoridation law was signed in Hilo making the County of Hawaii the first in the state to authorize the public health measure.

(Continued on page 36)



Book Reviews

Dental Plaque. McHugh, W.D., ed. A Synopsis. E & S Livingstone Ltd., Edinburgh and London Copyright 1970 by University Court of the University of Dundee. 298 pages. Price \$20.00

The rapid acceleration of dental research in recent years has resulted in a lag between knowledge gained about dental diseases and dissemination of this knowledge to the practicing dentist. That area of research related to dental plaque and its effects on the oral hard and soft tissues is an example. *Dental Plaque*, a record of the papers presented during an international symposium on this subject, represents a significant attempt to present the most recent research findings regarding plaque and its role in dental and periodontal pathology.

Dr. W. D. McHugh is responsible for compiling and editing the papers and discussions present in this book. Participants in the symposium consisted of a distinguished group of international researchers currently investigating some aspect of dental plaque.

The book presents a synopsis of each scientific session held during the symposium. Aspects of plaque presented in the text concern formation, structure, biochemistry, bacteriology, prevention, and control of dental plaque. References concerning the significance of factors found in these areas as they are related to the etiologic role of plaque in dental and periodontal diseases are summarized. A particularly interesting review of the concepts of prevention and control of plaque by Dr. Harald Loe, is especially pertinent reading material.

Dental Plaque, affords detailed information about that etiologic factor now recognized by most dental authorities as the primary agent associated with gingivitis, marginal periodontal disease, and dental caries. Practical information concerning the prevention and control of this etiologic factor are discussed. An understanding of the concepts presented in the text will enable the dentist to relate to his patients recent information on plaque and its influence on oral health. Dentists engaged in teaching will find this book to be of value as a reference work on basic research in this field.

EARL V. PATTERSON, III, D.D.S.

Four-Handed Dentistry for Dentists and Assistants. Edward Wolfson, 180 pages, 153 illustrations. \$9.85. The C. V. Mosby Company, St. Louis, Missouri, 1974.

This rather brief book, written by a practicing dentist, is divided into twenty-two chapters with illustrations directly related to assisting techniques.

The author states in the preface that his objective was to

produce a text to serve as a manual for dentists, dental students, dental hygienists, dental assistants, and expanded duty auxiliaries. The book seems best suited for the dentist and dental assistant with previously developed knowledge and skills in the art of four-handed chairside procedures.

Material included in the chapters is often sketchy and the reader must have prior knowledge in order to make maximum use of the suggested methods in chairside procedures.

In summary, the book is quite easy to read, interesting, and the illustrations are of good quality. The addition of this book to a professional library would enhance the source material for new employees and provide a basis for office in-service training.

W. D. STRICKLAND, D.D.S.

Dentistry for the Child and Adolescent, 2nd Edition, McDonald, Ralph E.: 561 p. C. V. Mosby, 1974.

Dentistry for the Child and Adolescent is an excellent pedodontic text for the student and practitioner alike. In spite of the fact that the book has fifteen contributing authors, it is extremely well written throughout. The bibliographies, following most chapters are excellent. The illustrations are abundant (1,056) which facilitate the reading in all chapters.

The book begins with an examination of the child's mouth and soft tissues, followed by an excellent chapter on behavior guidance for the child patient. The final chapter discusses the dentist and his staff in their role in community dentistry.

The author has put much emphasis on preventive dentistry in his second edition. Overall, the material is well documented and well written, however, I find the sequence hard to grasp. There is a chapter on tooth brushing, and another on nutrition (a good overall review of nutrition, however its relevance to dentistry—particularly in the discussion of fluoride—is lacking). Oral hygiene evaluation is covered in the chapter on gingival disease, diet evaluation and more tooth brushing is discussed in the cariology chapter. In other words, preventive dentistry is dispersed through out the book and I believe a consolidation of this fine material would be beneficial.

In my opinion, the two most outstanding chapters are pulp therapy and management of traumatic injuries to anterior teeth. Both chapters are well written, well illustrated and cover the pertinent literature on the controversies in the field of pulp pathology.

In addition, the chapter on genetics and its role in dental anomalies is excellent. It tackles a most difficult subject in

easily understood terms. The author (David Bixler) is to be commended.

The chapter on dental materials barely mentions the newer materials (i.e. polycarboxylate cements, impression materials, anterior filling materials, stainless steels) used in pedodontics today. Unfortunately, there is no bibliography at the end of this chapter.

Another chapter that I feel does not come up to the standards met by the other chapters in the text is the important chapter on "Growth and Development of the Face and Dental Arches." This dynamic topic is far too superficial. The theories on growth are unclear, and poorly illustrated. This chapter should have been expanded in depth and content.

There are many well written chapters. Restorative dentistry (with the exception of too little on the acid etch technique), the handicapped patient and the problems therein, periodontal disease in children, space management, radiographic technique and practice management are all informative.

In summary, *Dentistry for the Child and Adolescent* is a very comprehensive text book. My criticisms are mild in comparison to the wealth of beneficial knowledge in its pages. The author and its contributors are to be congratulated in assembling a pedodontic text which can be used by all dentists with an interest in providing the best dental services for the child patient.

EUGENE F. HOWDEN

Minor Tooth Movement in General Practice, by Arnold Geiger, B.A., D.D.S. & Leonard Hirschfeld, B.A., D.D.S., 515 pages, 1379 illustrations, \$29.50 St. Louis, The C. V. Mosby Company, 3rd Edition

This book is intended as a teaching and reference guide for minor tooth movement for the general practitioner. According to the authors, this edition includes additional clinical material for the clarification of diagnosis and technique with special attention given to recent advances in technology.

The first four chapters in the book are concerned with an overview of minor tooth movement, diagnosis, case selection, and etiology of commonly encountered problems. More than half of the book is devoted to the technique of minor tooth movement, with a single chapter on the subject of tissue changes during tooth movement. Special attention is given to the application of new bonding systems used in orthodontics.

Generally the chapters are well referenced; however, very few new references have been added since the second edition. The chapters have good continuity with excellent illustrations throughout the book.

The index of the book is well planned with numerous cross references present that lead only to the entries of the subject matter in the text. The table of contents breaks the chapters down into subtitles for rapid reference. More recent material concerning the etiology and tissue changes could have been included in this edition. Since the book was intended partially for teaching purposes, these subjects need to be expanded and brought more up to date. The addition of information concerning systemic problems of tissue response would be useful.

This book would be especially useful to the general practitioner as a reference source for minor tooth movement.

BARRY G. MILLER, DAVID FISHER, TOM HARVEY

Monheim's Local Anesthesia and Pain Control in Dental Practice, by C. Richard Bennet, 338 pages with illustrations, \$14.50 The C. V. Mosby Company, Fifth Edition 1974.

This new edition of Monheim's original text has been prepared in order to incorporate new concepts, new techniques, and newer drugs into this popular book. This new edition would be an excellent teaching aid to the dental student and practitioner.

The first portion of the text introduces the practitioner to basic principles of pain, pain perception, and the normal physiology of nerve conduction. A significant chapter on the trigeminal nerve has been contributed. This chapter goes into great detail in explaining the normal anatomy and physiology of the trigeminal nerve, including the motor and sensory pathways of each of the branches of the three main divisions of this cranial nerve.

The next section of the book deals with the principles and techniques of dental local anesthesia. The author discusses the methods of induction for local anesthesia and the factors involved in selecting which method to use. A rather extensive chapter follows which explains, in detail, the techniques involved for intra- and extra-oral approaches to dental local anesthesia. This portion of the text is an excellent guide for teaching the dental student local anesthetic techniques.

The author then discusses the local anesthetic drugs, their chemistry and pharmacology, and the desirable properties an ideal local anesthetic drug should have. A later chapter is used to explain the chemistry and pharmacology of the vasoconstrictors used with the local anesthetic drugs.

One of the most important chapters in this book deals with the complications that can arise from the use of local anesthetic drugs. This chapter is extremely well done and deals with the complication, its symptoms, the appropriate treatment and how it can be prevented. The author continually emphasizes the prevention is the best treatment for local anesthetic complications. Medical emergencies in the dental office are also discussed with a good review of cardiopulmonary resuscitation techniques. Part of the prevention of complications is adequate evaluation of the patient. The author's explanation covers the medical history and other evaluation procedures.

A general overview of conscious sedation, post-operative analgesics, sterilization, and local anesthetic equipment are discussed. The reader is referred to other texts for more specific information in these areas.

The final chapter entitled "Local Anesthetics and the Law" is an excellent overview of the basic principles of law and how they relate to dentistry. The contributor discusses dental jurisprudence and how to help prevent legal action against the practitioner. Also emphasized is that prevention is the best treatment for "the disease of malpractice."

The new edition of this text is an excellent source of information on dental local anesthesia and the various ramifications associated with it.

BARRY G. MILLER
J. RICHARD SVITZER

Conscious-Sedation in Dental Practice, by C. Richard Bennett, D.D.S., Ph.D., 212 pages with illustrations, \$15.00 St. Louis, The C. V. Mosby Co., 1974

Conscious-Sedation in Dental Practice, is a new text which aims to present a philosophy of pain relief with safety in

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LETTERS to the Editor

Hold the Line on Fees

By Carlton H. Williams, D.D.S.*

The record compiled by the nation's dentists in holding the line on the costs of dental services is laudable—in spite of the hardships and frustrations of two and a half years of federal controls on the economy. For the 12-month period ending March 31, the dental fee indicator rose only 5.0 per cent while the cost of living in general for the same period increased 10.2 per cent.

Now, however, is the time for serious evaluation of our fee structure. The immediate goal of the dental profession must be the prevention of any large "bulge" in dental fees as a result of the expiration of the government's Economic Stabilization Program.

The Administration has told the Congress and the entire health care industry that without the restraint of federal controls, rapid escalation of health costs is a strong likelihood. The Administration has also urged that if health providers do not exert every possible effort to contain prices, the Congress should take the necessary steps to reimpose controls.

* President, American Dental Association

ITEMS OF INTEREST

(Continued from page 33)

Dr. McLeran New Iowa Dean. Dr. James H. McLeran, executive associate dean of the University of Iowa College of Dentistry, will become dean of the College on July 1. He will succeed Dr. Donald J. Galagan, who will become the new AADS executive director on that date.

Dr. McLeran, before returning to Iowa in 1972, was chairman of the Oral Surgery Department at North Carolina. In 1962-1963, he was in private practice in Los Angeles.

The American Academy of Periodontology. The American Academy of Periodontology will hold a historic Sixtieth Annual Session in Atlanta, October 2-5, 1974 at the Regency Hyatt House Hotel. A record attendance of 2,000 persons is expected at the meeting which will feature a symposium on "The Practice of Periodontics" that will explore interrelationships between specialist, patient and referring dentist; financial management of a practice;

and the pro's and con's of professional associations and incorporation.

Chicago. Approximately 25,000 dentists, their wives and guests are expected to attend the 115th annual session of the American Dental Association scheduled November 10 through November 14 in Washington, D. C.

Housing accommodations will be offered in 40 hotels and motels in the Washington metropolitan area. Headquarters hotel will be the Washington Hilton Hotel, where the House of Delegates will meet.

The headquarters hotel is reserved for officers and trustees, past presidents and past trustees, state society officers and official delegates and alternates.

The Opening Meeting will be held in the Washington Hilton Hotel Sunday, November 10 at 9:30 a.m.

Location of the scientific session as well as scientific and technical exhibits will be the Sheraton-Park Hotel.

A Boy Scout Merit Badge In Dentistry. This is being developed by the ADA Bureau of Public Information, in co-

Let us recognize the fact that such new economic controls would be no less restrictive than Phase IV.

In my travels around the country in recent weeks, I have discussed many of these matters with members of the Association. I have every reason to believe that my colleagues will continue, as they have in the past, to act reasonably and responsibly.

As the practitioner reviews his current charges, I feel certain that he will recognize that he has a right to raise his fees to a certain extent to reflect increased practice costs that have resulted from the long period of inflation. At the same time, I believe that he should also seriously examine avenues for increasing his productivity to avoid setting sharply higher fees.

Each individual dentist has a solid commitment not only to his patients and his profession but also to his community and country. This commitment is stated in our Principles of Ethics. However, the dentist cannot be expected to stem the swelling tide of inflation singlehandedly. We urge Congress to devise some reasonable and equitable solutions.

operation with the Bureau of Dental Health Education.

ADAA to Observe 50th Anniversary. This year, more than 20,000 members are observing the 50th anniversary of the founding of the American Dental Assistants Association. According to Claire Williamson, CDA, president of the association, special commemorative events will highlight the ADAA's golden anniversary annual session, which convenes in Washington, D. C., November 10-14.

Special tribute will be paid to the memory of Juliette A. Southard, the New York dental assistant who founded the ADAA in 1924.

Plaque Removal. Complete plaque removal once a day with brush and floss will maintain healthy gums, but extending the time interval to once every third day is not effective in maintaining periodontal health, according to a study published in the May issue of the *Journal of Periodontology* by Richard M. Kelner, D.M.D.; Barry R. Wohl,

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PARAFORMALDEHYDE-CONTAINING PASTES IN ENDODONTIC THERAPY

(Continued from page 17)

cal drainage whenever the probability of a post-treatment flare-up is suspected.²⁶ This surgical intervention involves trephination of the bone over the involved area. Trephination is a valid therapeutic measure whenever surgical drainage is indicated. However, it is seldom necessary in routine endodontic practice.

Summary

Long term success in endodontic therapy is achieved by thorough debridement of the root canal system and by filling the canals with a sterile, inert, relatively non-resorbable filling material.

Paraformaldehyde-containing pastes are not indicated for the filling of root canals. These pastes may be useful in temporary vital pulpotomy procedures, but definitive endodontic therapy will probably be required for long term success.⁴

Powered instrumentation of root canals may be a timesaving procedure, but care must be used to avoid over-instrumentation, ledging, and perforations. The use of hand instruments with careful digital control is the safest method of debriding and enlarging root canals.

Trephination of the bone is a valid therapeutic measure whenever surgical drainage is indicated, but is seldom necessary in routine endodontic practice.

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Reprint requests to:

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University of North Carolina
Chapel Hill, N. C. 27514

ITEMS OF INTEREST

(Continued from page 36)

D.D.S.; Michael J. Deasy, B.D.S., M.D.M., M.S., and Allan J. Formicola, D.D.S., M.S.

Acute Alcoholism and Craniofacial Trauma. Chicago — One of the most perplexing diagnoses the oral surgeon may have to make is the examination, evaluation and treatment, either alone or in conjunction with a physician, of a patient in the emergency room with acute alcoholism and possible cranial injuries.

"The usual neurologic examination is initially difficult to apply," a University of North Carolina oral surgeon reports. "General cerebral functions such as general behavior, level of consciousness, intellectual performance, emotional status or thought content, in the presence of high blood alcohol levels, are difficult to interpret."

Further, "the special cerebral functions such as cortical sensory interpretation, cortical motor integration and language also cannot be evaluated," he said.

Ernest W. Small, D.D.S., M.S., chairman of the department of oral surgery at North Carolina, lists in the April issue of the *Journal of Oral Sur-*

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gery the possible effects of alcohol and the common effects of head injuries. By understanding these effects, the oral surgeon can more easily arrive at a differential diagnosis and better patient care will result, he said.

Chicago. Future dentists have been cautioned by an educational psychologist that they will probably have more trouble with patients' emotional involvement than with sore gums when fitting patients with dentures.

There is a great deal of mysticism and misinformation surrounding dentures and dentists must be prepared to deal with this, according to Dr. William F. Fitzgerald of the University of Michigan School of Dentistry at Ann Arbor, Michigan.

"Patients who are faced with the necessity of complete denture treatment for the first time are confronted with a host of new experiences: physical, emotional, social, psychological and function," according to Dr. Dewey H. Bell of Richmond, Virginia.

Dr. Bell, who is professor and chairman of the department of removable prosthodontics at the Virginia Commonwealth University School of Dentistry, said one of the great stumbling blocks to success in denture treatment is the patient's ignorance or lack of knowledge of the nature of the treatment he seeks.

"This is a stumbling block that can be removed. An attempt at patient education after the problems have arisen is a futile attempt. Patient education must precede treatment."

In 1973 the American Fund for Dental Health Raised Over \$1 Million for the Second Consecutive Year. Honor Contributors in North Carolina Who Gave \$100 or More Were Grover C. Hunter, Jr., Harold W. Mohorn, and Frank P. Stout!!

Periodontal Status During Pregnancy. Plaque, rather than hormones, is the precipitating factor in the occurrence of periodontal disease in pregnant women, according to a study published in the *Journal of Periodontology*.

Although the study found that the hormonal changes of pregnancy are predisposing factors for changes in the gingiva of pregnant women, it labeled dental plaque as the factor that triggers the disease process.

Amira H. Arafat, D.D.S., M.S., studied the oral hygiene and periodontal indices of 477 pregnant women and

233 non-pregnant women. These indices were recorded according to Green and Vermillion and Russell respectively.

The Dental Profession's Continuing Concern for Consumer Protection. This is being demonstrated in a series of public service messages for newspapers and television and in new dental office literature.

The latest effort is an illustrated newspaper feature column that has been distributed to 4,238 small-town daily and weekly newspapers across the country.

Entitled "About Your Health," the feature column shows how the dental patient/consumer can look for acceptance statements of the ADA Council on Dental Therapeutics and the ADA Council on Dental Materials and Devices on many over-the-counter dental health aids.

New Orleans, Louisiana. "Tempo '74" is the title of the 27th annual New Orleans Dental Conference set for September 22-27 at Braniff Place in the famed Crescent City.

Designed to help dentists "stay in tune with the times," the conference will feature presentations by eight leading clinicians. Last year 2,300 persons registered for the New Orleans event.

Braniff Place, formerly known as The Jung, is one of the city's largest hotels. It is located on world-famed Canal Street, within easy walking distance of the historic French Quarter on one side and the gigantic Superdome, nearing completion, on the other.

American Dental Hygienist Association at All Time High. As of May 1974, the Association has an active membership of 14,191 representing more than a 12 per cent increase over 1973. Junior membership has also increased to 8,880, a nine percent rise over last year's figures.

Weinberger Foresees "Rigid Federal Monopoly" If Health Providers Fail to Police Costs. A "rigid federal monopoly" could replace the private health care system if the health care industry cannot police its own costs without federal controls, according to HEW Secretary Caspar W. Weinberger.

10 More Television Stations to Carry ADA Messages. Ten television stations

in three states are joining the Association's dental health public service program this month.

Each station will receive filmed messages on a bi-monthly basis. The 10 additions bring to 510 the number of stations nationally that donate \$8 to \$10 million in air time to dental health each year. Joining this month are WIS in Columbia, S.C.; WMUL in Huntington, W. Virginia; and eight stations in Georgia: WATU, WJBF and WRDW, all in Augusta; WCWB in Macon; WTOC and WJCL, both in Savannah; and WTVM and WYE, both in Columbus.

State and local dental societies may add stations not presently included in the regular ADA distribution program for a cost of \$30 per station, per month. Further information and a list of stations now receiving dental health spots are available from the ADA Bureau of Public Information.

American Academy of Pedodontics Contributes \$5,000 to AFDH Student Loan Program. The American Academy of Pedodontics has become the first specialty group to contribute to the American Fund for Dental Health's guaranteed loan program for graduate dental students in approved programs.

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BOOK REVIEWS

(Continued from page 35)

dental practice. This book should be interesting to any dentist with a desire to use sedation in his office. It provides introductory information concerning pain physiology, pharmacology, and the nature of anxiety, along with chapters devoted to technical considerations.

The book introduces a concept of conscious-sedation, and the objectives of the technique. The objectives are to alter the patient's mood, keep him conscious, maintain patient cooperation, maintain active intact protective reflexes, keep vital signs within normal limits, and elevate the patient's pain threshold. The author stresses that the dentist's technique should be based on understanding and that reliance on a cookbook approach may be hazardous.

A very comprehensive chapter is dedicated to preoperative history and physical evaluation. This chapter and his chapter on management of medical emergencies, combine to give the practitioner a package of information not limited to application of conscious-sedation alone.

The presentation of nitrous oxide sedation is complete, including pharmacology, patient preparation, and the technical approach to administration. Following this, a chapter is devoted to inhalation sedation equipment. The reader noticed that the chemical agents were presented in a basic and limited fashion. As intravenous agents were introduced,

they were grouped, with some emphasis given to the most standard agent and a short presentation of the other group members.

Techniques of intramuscular and intravenous drug administration are seldom introduced in dental texts. An informative chapter that includes both a detailed explanation of "How to" and a description of necessary armamentarium is a part of the text.

One of the highlights of the book is a chapter on the role of suggestion in pain and anxiety control. We are reminded that it is often what we say that causes patient anxiety. The contributor says, "The dentist must tell the patients what is involved in their treatment, but he can do so in language that will not increase apprehension. This will require that he have some understanding of the attitudes of his patients, which can only be gained by listening to them."

Throughout the book there are well-drawn illustrative figures, photographs and graphic figures that are well captioned. The book is recommended as a fine introduction to the concept of conscious-sedation. This information can be supplemented with detailed information on the agents used and supervised introductory experiences to completely provide the dentist with the tools to administer conscious-sedation.

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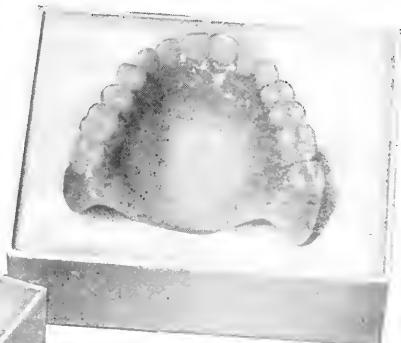
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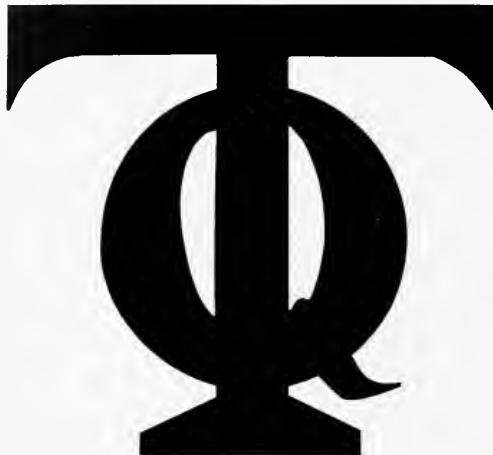
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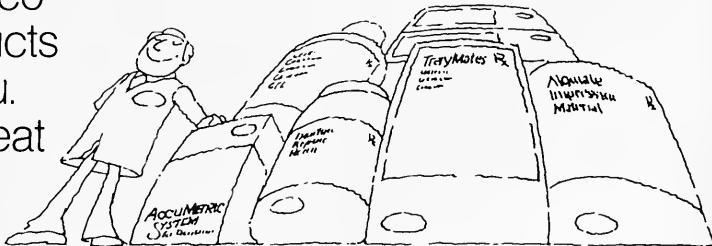
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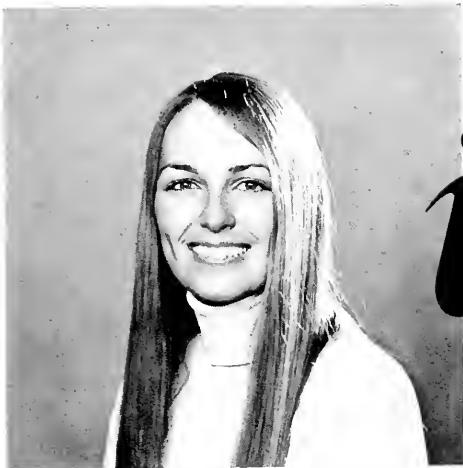
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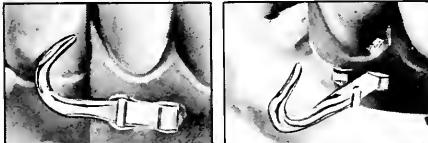
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Goldman, H. M., and Cohen,
D. W., Periodontal Therapy,
ed. 4, St. Louis: The C. V. Mosby
Company, 1968, pp. 319-320.

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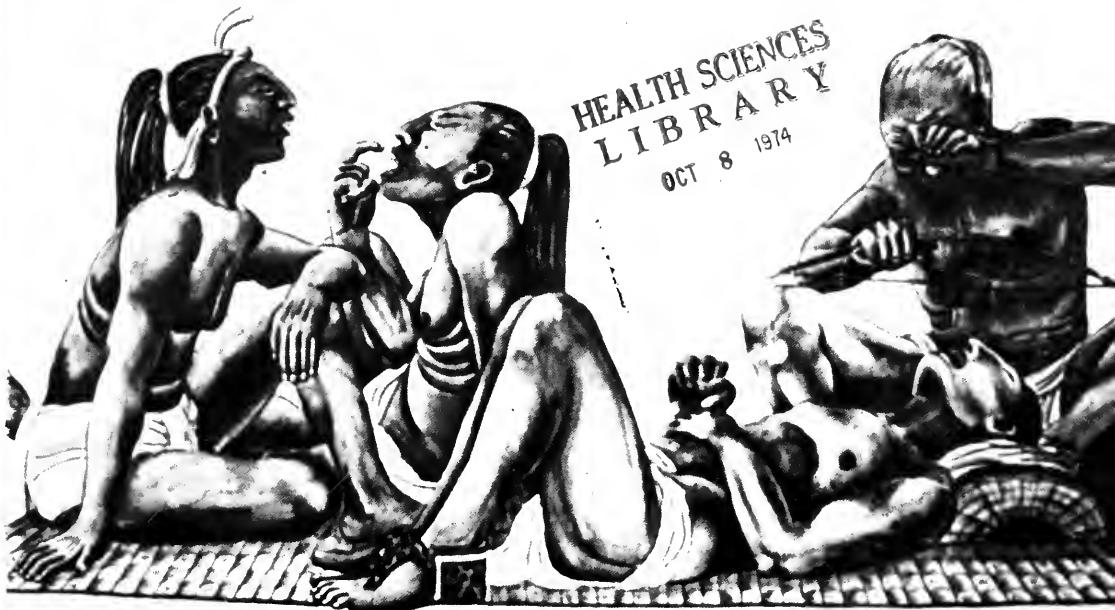
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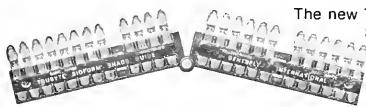
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Expressions of opinion and statements of supposed fact are the author's and should not be regarded as views of the North Carolina Dental Society.

Meeting American Dental Association

Washington, D. C. November 10-14, 1974

Dental Seminar Day

Memorial Hall, Chapel Hill December 6, 1974

Dr. Spencer Frankl, Boston University

"Traumatic Injuries of the Developing Permanent Dentition"

Injuries to the developing permanent dentition can pose a significant challenge to the diagnostic and therapeutic skills of the clinician. There exists no single dental disturbance that has greater psychological impact on both the child and the parent since the injury affects the permanent dentition and frequently involves the loss of coronal tooth structure. The primary responsibility of the clinician is to preserve and maintain the vitality of the injured teeth and to restore them in such a manner as to recreate a desirable cosmetic result. This presentation will concern itself with these matters with particular attention to the emergency aspects of these types of injuries. The discussion will emphasize the treatment of exposed dentin or pulpal tissues in light of the degree of coronal destruction and the extent of apical closure. Diagnostic tests, radiographic interpretation, and treatment planning will be stressed. In addition, the use of the filled and unfilled resin systems will be reviewed and their role in the restoration of the damaged tooth structure.

Dr. Spencer N. Frankl is Professor and Chairman of the Department of Pedodontics at Boston University School of Graduate Dentistry where he also serves as Associate Dean.

Continuing Education Travel Programs Sponsored by North Carolina Dental Society

Caribbean Fly-Cruise

February 22-March 1, 1975, Approximately \$550-\$665

Rhine River Cruise, Switzerland, Germany, Holland

June 29-July 5, 1975, Approximately \$695

Any New Ideas for The Great Seal?

Since the Lord Proprietors' day is has
been changed at least eight times.

By PETE IVEY

EDITOR'S NOTE: *The Great Seal of the State of North Carolina appears on cover two of our journal. The following is an article, by Pete Ivey, reprinted from the "The State," June 1974 about the seal. A color illustration of the seal appeared in "The State" magazine, for which the NORTH CAROLINA DENTAL JOURNAL was given credit. Mr. Ivey is head of the News Bureau for the University of North Carolina.*

Now is the time for all good North Carolinians to think about revising "The Great Seal of the State of North Carolina"—that is the attitude taken by several historians and commentators on the spasmodic changes in the seal the past 309 years.

Once, under the Lords Proprietors, North Carolina's seal featured a royal crown with jewels, three Indians, a cow, a tree, and a helmeted woman seated on a throne, all together with the coats-of-arms of the Lords Proprietors.

There have been eight major changes in the seal over these many years, the biggest revision coming after the American Revolution. The Indians and the royalty were dropped from the seal.

Instead, after 1776, Roman goddesses were pictured on the seal. Minerva, the goddess of wisdom and the arts, and Ceres, goddess of agriculture, were pictured in flowing robes. Minerva held the Constitution in one hand, and held a long pole in her other hand. On top of the pole was a crimson cap. Ceres held in her arms a cornucopia containing corn, apples, grapes, pears, melons, and other foodstuffs.

A North Carolinian wrote in 1793 to Governor Richard Dobbs Spaight, criticizing the seal for not being modern. He said a pine tree ought to be drawn on the seal, symbolic of the "Tar, Pitch and Turpentine" state. Tobacco should be conspicuous on the seal, he said. He proposed also that an Egyptian pyramid should be centered, to indicate stability.

Should the insignia be revised today to include the major



Tar Heel products, the seal might feature tobacco, furniture, peanuts, textiles, strawberries, cucumbers, persimmons, dogwood, the Cardinal, and some representation of the tourist industry.

Ought the classical figures of the Roman goddesses be jettisoned in a new seal design? Perhaps not. Minerva and Ceres, though attired in robes fashionable in ancient Rome, are in some aspects up to date with 1974. They wear no shoes nor bra. Their gowns are full but fetching.

How about the red caps? Minerva wears a russet-hued cap, and a duplicate of it hangs at the top of the pole she bears. The hats have a classical history, too. These are derived from Grecian phrygian caps, indicating freedom from slavery. Roman galley slaves, when they won their freedom, also wore these saucy chapeaus. In the French Revolution, the caps became a symbol of freedom. It was natural that in the American Revolution the same kind of cap should be used. That cap now decorates The Great Seal of the State of North Carolina.

The present great seal was adopted by the Legislature of 1893. Minerva and Ceres remain the prominent personages. Other features of the seal are:

—The date "May 20, 1775" is inscribed just above the goddesses. That is the date of the signing of the Mecklenburg Declaration of Independence.

—Below is the state's motto: "Esse Quam Videre," meaning "to be rather than to seem."

—A sailing ship is in the background, and a hilly terrain is prominent.

—Ceres holds a few sprigs of wheat in her right hand, and in her left she steadies the cornucopia. Minerva holds the Constitution and the cap and pole.

—Around the upper circumference of the seal is the inscription, "The Great Seal of the State of North Carolina."

This is the design used on the seal that authenticates official documents of the State of North Carolina.

Items of Interest

New York Bill to Aid Private Dental Schools.

The New York state legislature has adopted a higher education bill that provides for capitation grants to the private dental schools in the state.

The capitation rate will be \$1,500 for each lower division student enrolled and \$2,500 for each upper-division student. The legislation places private dental schools in the state on a dollar parity with private medical schools which had previously received capitation aid.

Membership at 121,068.

Total membership in the American Dental Association climbed to a new all-time high on July 1 with 121,068. On December 31, 1973, there were 118,996 members. A breakdown shows: active and life members, 103,270; affiliate members, 598; associate members, 54; honorary members, 116, and student members 17,019.

The Importance of Political Involvement

Dr. William M. Creason*

EDITOR'S NOTE: *Excerpts from paper presented at the 25th Annual Management Conference*

. . . It is the *government* that acts as the rules committee, referee, and umpire in the game of life. And, yes, it also acts as the policeman.

In these great United States, we have a representative form of government—we call it a democracy; some call it the American Way. Daniel Webster said, "It is to self-government, the great principle of popular representation and administration, the system that lets in all to participate in its councils—that we owe what we are and what we hope to be." Is it not, then, the dentist's responsibility to make sure that the dental health laws and regulations and methods of delivering dental care are in the best interest of the public whom they serve. There is certainly nothing morally wrong about sharing in the decisions and the running of this democratic system.

The immediate ends of our government should be consistent with our welfare, not by accident or indirection. Our only hope for preserving a vigorous, alert, advancing profession—for providing good oral health care to our fellow man—is by transforming the attitude of acquiescence and provincial complacency of our fellow dentist into a sense of professional pride and national involvement with a keen interest. An effective way to guard and to insure good dental health laws and regulations is to affirm our unity through our political action committee of the American Dental Association, ADPAC. . . .

It seems to me that we can better accomplish our goals by acting collectively through ADPAC, than by tripping off in 50 different directions. Since our federal government plays such an

important role in all aspects of life, including our professional life, we cannot afford to ignore it. Nor should we expect someone else to champion our cause, or through complacency, allow political representatives to chart us on the wrong course. Let us not put blind faith in governmental decisions. In the end, *responsibility* is the only *developer* and *fixer*. The direction our profession follows is in direct proportion to our capabilities as dentists to tell our story and to convince our elected officials and their appointed agency representatives. . . .

There is probably no fundamental area of public thought and awareness that has been more clouded by suspicions, distrusts, fears, and uncertainties than our political system, and our methods of electing and of financing candidates seeking to represent us. Yet, a respectful and objective viewpoint of this cornerstone of democracy—this American Way—will find it rooted in two guiding principles: *Individual responsibility* and *Involvement*. . . .

How is the PAC movement doing this year? There are 41 states with political action committees. Twenty-five are working with ADPAC on the national level and have contributed as of this date a little over \$73,000. What we need is all 50 states working together. A 100 per cent effort. . . .

Some states have contributed nothing, a zero toward the national effort—where all major health legislation is written. I don't believe that these particular states just don't care what happens or wish to be freeloaders. I believe we have just not motivated their leadership into action. We need your help and involvement. . . .

Help ADPAC help your profession stay on the right track. Become involved in government where the action is and where the rules are made. Together we can move mountains; alone we are just pebbles on the beach easily shoved around.

ADA Leadership Bulletin, Vol. IV, No. XIII

Chairman, Michigan Dental Political Action Committee*

ITEMS OF INTEREST

Legal Responsibility to Screen Patients for High Blood Pressure.

The dentist's legal responsibility for physical evaluation of his patients including hypertension screening arises from state dental laws and court doctrines resulting from malpractice litigation, said Bernard J. Conway of Chicago, ADA assistant executive director for legislation and legislative affairs.

Dentists are being urged to join in a national program of high blood pressure detection as a routine office procedure. In several locations such screening is being done on a routine basis and any suspected cases of high blood pressure are referred to the dental patient's physician for management and treatment.

One of these efforts involves a joint screening program conducted by Fairleigh Dickinson University dental school and the Bergen County (NJ) Dental Society and another program is being conducted at the Medical College of Georgia dental school.

Commenting on the legal aspects of dentists' participation in hypertension screening, Mr. Conway made the following observations:

—Three state dental laws specifically authorize dentists to conduct physical evaluations (California, Pennsylvania and Michigan). Omission of specific mention in other states does not, however, mean the dentist is not so authorized. In fact, the reverse is probably true because the state dental laws, by implication at least, express that authorization.

Greater New York Dental Meeting to Celebrate Fiftieth Anniversary.

The Greater New York Dental Meeting will celebrate its fiftieth anniversary this year with a much expanded program of professional and special events. For the first time the Meeting will be extended to six full days with activities beginning on Saturday, November 30 and continuing through Thursday, December 5. Headquarters hotel again this year is the New York Hilton.

Sponsored by the First and Second District Dental Societies of the State of New York, the Greater New York Dental Meeting is the world's largest dental educational seminar. From its beginning in 1924 with some 250 dentists attending two days of demonstrations at colleges, hospitals and even private offices in New York City, it has grown dramatically in size and scope. The 1973 five day meeting attracted a record-breaking 25,474 participants.

The complete program for the 1974 Greater New York Dental Meeting will be published in September. To receive a copy or further information, write to the Greater New York Dental Meeting, New York Hilton, Suite 528, 1335 Avenue of the Americas, New York, N. Y. 10019.

LETTERS to the Editor

NOTICE TO ALL DENTISTS!

I have recently been appointed chairman of NCDHA Placement Service. As of this date the committee has not been very successful in obtaining channels in which to keep in contact with the Dentist. I feel the success of this service is to keep it constantly before the Dentist's eyes.

As you know, through communications with last years chairman, the service is for both Dentists seeking to fill hygiene positions and Hygienists seeking positions.

I was very impressed but saddened by your editorial in the May issue of your *Newsletter*. I am referring to the subject of Dentists not attending the educational sessions at Pinehurst. You were so true in your statements. I had a box displayed on the registration table with a big sign reading, "Dr. Do You Need A Hygienist?". Only 16 Dentists took the time to fill one out.

I feel as though my committee is trying to render a service for the Dentists and Hygienists of North Carolina and getting very little cooperation. If you have any suggestions as how to better approach this situation I would appreciate your comments.

Enclosed is the announcement which I hope will promote state-wide interest. I would certainly appreciate you printing this in the next issue of the JOURNAL.

Dr. Shanks, if you need any further information, please call me at 787-8993. Thank you for your help.

Sincerely,

MS. JUDY HOLT, Chairman
NCDHA Manpower and Placement Service
P. O. Box 6154
Raleigh, N. C. 27608

ITEMS OF INTEREST

Why Did George Washington Look So Stern and Rigid in the Famous Portrait by Charles Willson Peale?

It is not difficult to understand, that is, if you know that his dentures were made of a pound of lead. If he had relaxed his facial muscles, his artificial teeth would have dropped out of his mouth.

Those dentures were not the only ones made for Washington expressly for a portrait. Before artist Gilbert Stuart had Washington begin sittings for the famous unfinished portrait, he ordered the construction of special dentures to fill out the President's face.

The dentures were carved from hippopotamus ivory by a dentist, James Gardette. They accomplished the artistic goal, but they would have been mostly worthless for eating.

These were two of George Washington's special dentures that are known in addition to his "working teeth." The subject of Washington's oral health is part of an article, "Oral Surgery and the Presidents — A Century of Contrast" written by a son of one of the presidents, Dr. Warren G. Harding II, a physician in private practice in Columbus, Ohio. The article appears in the July issue of the *Journal of Oral Surgery*, published by the American Dental Association.

Washington apparently had rather poor teeth. "His diary contains frequent references to dental care such as it was," Dr. Harding reports. "When he was age 22, the record shows that an extraction was done for a toothache. Almost annually there was a recording of a tooth lost as a result of pain.



Below is a NCDHA Survey and Placement form card. The purpose of this form is to survey all N. C. Dentists as to their present employment or possible future employment of a Dental Hygienist and to aid N. C. Hygienists in securing positions. Please help us render this service to N. C. Dentists and Hygienists.

SURVEY FORM

1. Dr.'s Name and Address:
2. Do you employ a Dental Hygienist? Full-time
Part-time
3. Name and Address of Dental Hygienist:
4. Are you interested in employing a D.H.? Now
In the future
5. If in the future, When? Full-time Part-time

Mail to:
NCDHA Manpower and Placement Service
Post Office Box 6154
Raleigh, N. C. 27608

"Washington lost his last natural tooth, the lower left premolar, at age 65, just two years before his death. He had worn a denture since he was 57," Dr. Harding said.

Washington's poor oral health was consistent with the many other illnesses that he had and survived. In that era at least a fifth of all children died before age 5, so childhood diseases were accepted as inevitable and often no record was kept or even serious treatment given. Washington's record includes smallpox, tuberculous pleurisy, malaria, bacillary dysentery, malignant carbuncle, influenza, typhoid, pneumonia and the streptococcal infection of his trachea, of which he died.

"His survival to 67 years of age was almost a miracle," Dr. Harding said, "but his intimate knowledge of sickness and the imminence of death helped him to develop patience and courage so prominently seen in his public career."

During his lifetime, Washington had at least six known dentures made. John Greenwood was Washington's dentist who made a denture serviceable for a full eight years. There was a hole in the denture for Washington's last remaining tooth. The denture was equipped with eight human teeth attached by gold screw rivets, and the gum surface was covered with tinted wax to make it look as real as possible.

According to Dr. Harding, when Washington's final tooth was extracted Greenwood had it embedded in gold and wore it as a pendant on his watch chain.

"He always spoke highly of the services of his dentists. Indeed, when he returned to Mt. Vernon after completing the presidential terms, his first invited guest was his dentist," Dr. Harding said.

North Carolina Dental Auxiliary



Mrs. Richard M. Fields*

First District Auxiliary Meeting

The First District Auxiliary will be meeting with the Society at the Green Park Hotel in Blowing Rock September 27th through 29th. Cocktails and a dinner dance are planned for Friday night. Saturday will feature bridge, tennis, golf, and shopping. The annual business meeting is planned for 8:30 p.m. Saturday at the hotel. Door prizes will be awarded at this time. The program, "Driving Under Emergency Conditions," follows. On Sunday the ladies will join their husbands for one of the Green Park's famous luncheons.

WANTED: Tax-deductible contributions of scrap amalgam or money for the North Carolina Dental Auxiliary Scrap Amalgam Drive. A dentist's wife will call on your office the week of November 11th through 15th. Latest grant from this fund was to the North Carolina Council on Continuing Dental Education; "seed money" to initiate their statewide program of centrally administered continuing dental education.



Second District Auxiliary Meeting

Second District meets September 6th through the 8th at the Downtowner East in Charlotte. Cocktails, a banquet and dancing highlight Friday, with dinner and Monte Carlo planned for Saturday night. The Auxiliary business session will be at 11 a.m. Saturday at the motel. A luncheon follows at the Raintree Country Club where Dr. Gary Chapman will review the book *The Late, Great Planet Earth*.

Third District Auxiliary Meeting

October 5th through 7th at the Durham Hotel-Motel are the time and place of the Third District meeting. The Duke football game, Saturday evening at a dinner theatre, and a banquet and entertainment on Sunday night are on schedule.

Fourth District Auxiliary Meeting

Friday, October 11th, Fourth District Auxiliary members will have their business session at 11 a.m. at the Highland Country Club, followed by a program on making Chrismsons, the elaborate religious symbols made for Christmas decorations. Friday night the Society hosts an Oktoberfest and Entertainment. Golf and tennis are planned for the ladies with a banquet and entertainment Saturday night at the Bordeaux Motor Inn.

Fifth District Auxiliary Meeting

The Timme Plaza in Wilmington is the site of the Fifth District Auxiliary Meeting September 12th through the 14th. The business session is at 8 p.m., Thursday, at the Wilmington Hilton. Auxiliary members join their husbands for a cocktail party and dinner Friday. A coffee hour and bridge are planned. The program will be announced later.

President*
North Carolina Dental Auxiliary

GEORGE BENSON Dental Laboratories, Inc.

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PROCEEDINGS

118th Annual Session

District Officers Conference

House of Delegates

General Sessions

Minutes of Executive Committee



PRESIDENT'S REPORT

JAMES A. HARRELL, D.D.S.
Elkin

Mr. Speaker, fellow members of the House of Delegates, and distinguished guests, it is a happy privilege and a great honor for me to address this House of Delegates of the North Carolina Dental Society, which is the best in representative government, created by the dentists to benefit the people of North Carolina. This House continually strives for more and better treatment for the public. Throughout the many years and long hours that I sat where you are sitting, and Ralph Coffey was the Speaker and he is tonight, I never dreamed that I would be standing where I am tonight addressing you as your President. I sincerely appreciate this high honor and I want to state now that the many opportunities afforded me by this remarkable Dental Society, the oldest State Society in the United States, far outweighs any contributions that I have made to it. I thank each one of you and all of the other Society members.

Let us pause for a moment to thank Ralph Coffey for his many untiring years as Speaker of this House—no one could have been more democratic—let us give him a rising hand of thanks.

Each one of you have been elected by the dentists in your district to make the best decisions that you can to mold the future of dentistry. I have the utmost confidence in the good judgment of each one of you and I do not have any advice for you—only facts for your consideration. This reminds me of a joke about a father who was a physician—and he only had one piece of advice for his son who had just graduated and gone into practice with him. When you make a diagnosis never change it—you might have to talk around some but always come back to the original diagnosis—locked bowels—diarrhea—locked wide open.

Now, again, I do not have advice for you but I will try to give you a full review of facts for your consideration to help you make your decision on many issues. To be more democratic, I have asked Dr. Ralph Coffey to assign my address to a reference committee rather than appointing a customary committee of three members to report on the President's Address.

The history of dentistry has been colorful and noteworthy as the profession has evolved from a crude art through the recognized trade to a highly respected profession. For dentistry to have survived, this process must necessarily have been consistent with the ever changing and increasingly complex dental needs of society. It therefore seems reasonable to conclude that the continued development of dentistry will similarly require additional expansion and redirection as the requirements of society change rapidly in the future. While it is not always possible to

predict the nature of changes, it does seem reasonable that we should anticipate as much as possible any changes and be prepared to alter our organized dentistry to meet the needs of a maturing society. It is impossible to keep things the same, you either go forward or you slip backward. Thomas A. Edison once stated "we shall have no better conditions in the future if we are satisfied with all those which we have at present."

When my father started practicing in 1916 he vulcanized all of his full and partial dentures. When I got out of the Navy and started practicing in 1946 I would not consider anyone doing my partials and dentures but a laboratory. However, I spent hours and hours making my own inlays, crowns and bridges. Today as my son starts his practice we have a technician to make our inlays, crowns and bridges and we would not think of putting in a casting machine or any other equipment to do it. What is the next thing, if anything, that we let someone else do that does not take our expensively trained time?

This election year 1974 appears to hold some prospect for significant developments in health legislation, with an anticipated White House push for enactment of a national health insurance plan. In this troubled year 1973-1974 there is evidence of growing congressional interest in developing a national health policy and improving federal health planning. True, there is a wide range between what President Nixon seems to want in the way of health coverage, and what Senator Kennedy is proposing, but organized dentistry and medicine alike are realistically getting ready for the day when government will have a great deal to say about how health care will be provided and paid for. It is predicted that Congress is concerned only with the details of national health coverage and not with its desirability, and that dentistry will be included in whatever middle ground legislation is achieved.

Is there a health care crisis in dentistry in this State, North Carolina? It depends on what viewpoint you are considering it from and how educated and objective your viewpoint may be. Arguments would only confound the issue, but enlightenment should help. It seems more important to look at the demand for dental treatment and the need for treatment in this State. 99 per cent of all citizens in this State are affected by dental disease—24 per cent of the population are receiving regular dental treatment—40 per cent see a dentist one time a year. In finding out about need in your locality, have you ever asked your school principal and teachers how many bad mouths they see or how many problems they have with dental pain or have you asked the physicians how many bad mouths they observe

have you worried about the number of patients leaving your office without the total dentistry they need because of lack of funds? Now what is going to happen as we have more third party dental coverage plans and governmental financed health care packages to increase by a large percentage the ones seeking regular dental treatment and those seeing a dentist once a year? This is where health care delivery becomes important and needs study. Groups representing the consumers are becoming more interested in health care delivery. We must become more concerned with the problems of satisfying the needs of the people of North Carolina and not just the demands alone. We do not want socialized dentistry. I believe the best way to avoid it is to work with everyone and to develop the capacity and desire to change if it benefits more people.

In working hard to preserve our private practice we cannot afford to overlook the population explosion. In order to do this we must develop programs for the indigent and third party programs must become more successful and creative. Again, to what degree are education, higher level incomes, third party dental coverage plans and government financed health care packages going to increase demand patients, out of the 76 per cent of North Carolinians not receiving dental care? Today more than 18 million Americans have some form of dental insurance and the health insurance institute says that in ten years it will reach 80 million. What would a government program to take care of all children until age 20 do to the 76 per cent in need of dental care? It is predicted that the installation of the dental programs for the many millions of members of the United Auto Workers and the International Association of Machinists and their dependents will also lead to the management purchase of similar programs for non-union salaried employees in these industries and subsidiary and supplier organizations. That if past history is any indication, it would seem safe to predict that acquisition of dental benefits will spur union leadership in such industries as steel, petroleum, chemicals, rubber, communication, transportation and the building and construction trades to seek dental care coverage as a tax free fringe benefit, at the bargaining table in forthcoming contract negotiations this year and in succeeding years.

How would you predict that we will practice dentistry 10 years or 20 years from now? I heard an educator speak the other night, and he stated that new knowledge and change are taking place so fast that it will be impossible to even come close to any predictions for 1994, 20 years from now. He stated, "no longer will a body of knowledge be taught as a fact." Research is doubling knowledge every ten years, so in twenty years there is four times as much new knowledge. The new trend in education is to teach process and decision making and skills. There are some who say that we have done it this way for years and should not change. Would you like to think that you are going to put the same quality anterior restoration in ten years from today that you are putting in now? That would be very distressing to me.

Some predict, as there are more HMO's, prepaid programs, and third party services, the solo practitioner will have to worry about maintaining a highly complex business operation. We will be forced to produce more and better dental care at lower costs. It will involve more forms, more auxiliary personnel and more dentists' hours, and this will produce more modern group practices. In other words, dentistry is beginning to have all the elements of big business. Our Government has placed controls on us and it is predicted that they will stay on until the Government passes the Health Care Plan. Now, no one has to explain to me why dentistry is so expensive and how to justify fees. My father is a dentist. I have just graduated a son from dental school after eight years. The cost of a dental education is the highest of all the health professions and costs have been climbing steadily, rising at close to ten percent each year. We have just built a new dental office with eight operatories and put new equipment in it. Believe you me, I know how much it costs. Dentistry is expensive and for that reason insurance companies could not

cover it for years. Some people have looked upon it as a luxury because of its cost. Now, dentistry is considered a necessity and very necessary for total and complete health care. We do have a problem—it is expensive—there is a huge need—I did not say demand—how are we ever going to do it five years from now? Well, to make anywhere near an intelligent prediction we need all the research that we can get and then we need to study that research most seriously. It is thrilling to have the new American Fund for Dental Health organized. The former American Fund for Dental Education decided to take on greatly expanded commitments in the field of dental health and dental research. Therefore, the change in name, purpose and symbol. There is no question of the need. Cancer research and treatment have long been served by the American Cancer Society. Tuberculosis research and treatment have support through the American Lung Association. Heart disease has the American Heart Association. Far too long dental health and dental research have had to continue without benefit of a public foundation solely committed to the advancement of the nation's dental health. We have a big stake in a dental research building here at our own dental school and we do not want it restricted in any way to search for truth and better ways.

After careful consultation with the School of Dentistry, the office of the President of the University of North Carolina, a Committee of the Board of Governors of the University of North Carolina, and with the approval of the Executive Committee of the North Carolina Dental Society, I wish to ask you to consider approving the following resolutions:

16. Resolved, that the President of the North Carolina Dental Society immediately appoint a 5 member committee, one member from each district, to: (a) collect all research data from all sources pertaining to expansion of auxiliary duties (b) study and propose ways our auxiliary duties should be expanded in North Carolina (c) study and propose ways of educating our present auxiliaries to these expanded duties.

17. Resolved, that the North Carolina Dental Society endorse the additions to and changes in the Dental Practice Act of North Carolina submitted by the Dental Practice Act Committee and the University of North Carolina Administration to allow: (1) all appropriate dental research in or out of the dental school, (2) the expanded duty research in the private office to be completed, (3) all extramural programs for dental students by the UNC School of Dentistry and (4) hygienists employed by the Dental Health Division, Department of Human Resources to screen pupils, apply fluoride to their teeth and perform prophylaxis for indigent children.

In explanation of this resolution, the reasons for research have been previously stated. Concerning the extramural programs, our own dental faculty is continually seeking to improve the range of experience and quality of education offered to tomorrow's dentists. This is very vital for a student to be well-rounded. New educational trends try to get the student out in the stream of life. More and more of health education in all fields is becoming community based. All of us have been through dental school—how could we deny any phase of education that will make our students better dentists and help them start their practices? Personally, I would like for us to do as Virginia has done and allow our students, rising sophomores, juniors and seniors, to act as assistants and hygienists in the summer in private practices. You learn by doing and this would give them a much broader observation of the private practices than they could ever get in school. My son's six weeks with the Veterans Administration in Richmond, Virginia, has been invaluable to him in starting a general practice. Other students at MCV went out into a variety of other settings and it is my understanding that they were routinely grateful for the opportunity. The school has not specifically asked for these opportunities, but they have asked for reasonable flexibility to develop off campus experiences which provide students with appropriate exposure to the community, private practice and a variety of other real life experiences they will encounter when they graduate. Most of us

have for years expressed the need for such experience while in dental school since we feel that our education dealt too little with the realities of practice and community. The school has made it clear that such extramural experience is not designed to replace clinical experience in the school which is devoted to development of basic clinical skills and competency. I feel that an experience with any dentist in this room tonight would be of great benefit of a student.

As an explanation of the dental hygienists section of the resolution, we need this to allow the full implementation of the Preventive Dentistry Program sponsored by the North Carolina Dental Society.

Upon suggestion of Mr. Robert Howison, our legal counsel, I wish to propose another resolution:

18. Resolved, that the Specialty Licensure Bill submitted to the North Carolina State Legislature be withdrawn and tabled indefinitely.

The Executive Committee, after careful and long investigation, including the Chairman of the Legislative Committee, found that the bill was unpopular and most dentists did not want it and that two states that had it were sick of it. The Executive Committee voted unanimously to withdraw it, however, Mr. Robert Howison, stated that only the House of Delegates had the legal right to withdraw it, therefore, I am asking you to withdraw it and kill it now.

I am asking you to not to pass resolution 4 submitted by the Constitution and Bylaws Committee. Instead I would like to recommend that a resolution similar to 18-1973-H be considered by this House. This will allow the President-Elect to become President in the event the office of President becomes vacant. The President-Elect is much better trained and experienced. He has had his finger on the pulse much more through the opportunities afforded him. Please consider what is best for the Dental Society, not what might be best for the office of the Vice President.

I would like to ask you to pass resolution number 5 proposed by the Constitution and Bylaws Committee pertaining to new members joining our Society. If we are to continue to have a strong Society, we must have members that are dedicated, understand the principles, appreciate the past history, and understand organized dentistry. I do not know of a civic club or any other organization such as this that you can join by mail. This is an urgent must.

I am also asking you to pass resolution number 8 submitted by the Laboratory Relations Committee to register and re-register annually the laboratories and laboratory technicians. This has been done in South Carolina since 1946. Recently Texas passed similar legislation. This is also about the same bill that we in this State had ready to go four years ago and was stopped by a few loud voices. I think it is high time that we take a close look at our laboratory relations. The American Dental Association has finally realized that apathy toward the laboratory men was the best weapon for them to go to the legislature to ask for their licensing board. The American Dental Association House of Delegates in Houston this past year completely reversed its position on Dental Laboratory Regulations. It now has a committee to help states wanting to regulate dental laboratories. In Texas there were three denturists bills in committees. The Texas Dental Association and the Dental Laboratory Association of Texas after many meetings jointly sponsored the bill. It was quickly passed and signed by the Governor resulting in the death of the three denturists bills in the committees. Several interesting facts emerged from the Texas experience. (1) Close friendship and cooperation between the Dental Society, Board of Dental Examiners and the Dental Laboratory Association is essential. (2) Friendships must be established with members of the legislature long before support is sought. (3) A highly effective lobbyist is essential. (4) Political Action Committees must have enough money to support its lobby. (5) The dental profession should always approach legislators with proposals which are clearly for public good. (6) The

denturist movement is not dead. Look at what is taking place in Tennessee today—there is now a bill in the legislature to allow denturists.

It is hard to understand how some dentists get so excited about assistants or hygienists doing some very minor expanded duties and yet pay no attention to the laboratory men. Anyone, with no qualifications whatsoever, can set up and open a laboratory anywhere in North Carolina and start making anything to go in the mouths of citizens of our State. Each year we turn out students more trained to rely more on the laboratories and yet we do nothing to upgrade the education and quality of technicians. We have so ignored the laboratories and their requests to help raise their standards that they have lost a lot of faith in us. The laboratories in our State do not want to deal with the public. They are fine upstanding citizens in our state, members of churches, civic clubs, scout organizations and political groups. I think we are late, but there is still time to bring them under the dental umbrella to work with the other auxiliaries if we are willing to give the time and thought to it.

Last year at the annual session a motion was made to bring the House of Delegates back to Pinehurst at our annual meeting. The time and place of the House of Delegates meeting is set each year by the Executive Committee according to the rules of the House of Delegates. I am very opposed to putting the two meetings back together for the following reasons: (1) Attendance for all sessions has been extremely good and vastly improved over the joint meeting. (2) Attendance by non-delegates has increased over the past records. (3) As a separate meeting much more effort and interest has been put into it. (4) There is so much business now that we would have to add at least two days to our annual meeting. (5) Separate meetings gives much more time for reference committees to meet and write up their reports. (6) Separate meetings gives the delegates and the officers the opportunity for more continuing education the same as the other Society members while at Pinehurst. (7) Added cost at Pinehurst — None at Velvet Cloak (8) Lack of adequate space at Pinehurst. This year we have 10 clinicians and every breakfast, every lunch time, and every night is taken by various meetings. I have been in the House of Delegates for a long time and I think separating the two meetings is the best thing we have done within our organized Society.

In closing, it is a very great privilege for me to take this opportunity to honor our most remarkable Dean, James W. Bawden. Along with being a gentleman of personal charm and integrity, he has an outstanding empathy for both the dentists and the needs of the patient. The people of North Carolina are fortunate indeed to have benefited by his services for these last eight years.

In many ways Dean Bawden has been a "Man for All Seasons." The first and most outstanding of his accomplishments was his recognition of the need for a statewide preventive dental program in the public schools. He conceived the idea and then inspired the Dental Foundation and the Dental Society to hire Dr. Frank Law for studies and proposals. Then he guided the development of a plan for North Carolina. Because of Jim Bawden, ours is the first state in the nation to formulate such a plan.

His guidance and inspiration encouraged the Dental Foundation in a most progressive community college drive with which we are now familiar.

His tireless efforts in expanding the dental research in our dental school have opened many avenues of knowledge and understanding to those who want to search for truth.

It has been my happy experience to know him as a friend and appreciate his broad overview of the many areas of dentistry.

We wish him and his family Godspeed and look forward to their return to North Carolina.

Let us give him a rising hand of thanks.

I want to thank all committees for a job well done. I especially want to thank these: (1) The Steering Committee for Pre-

(Continued on page 14)

Report of the Secretary-Treasurer

J. HARRY SPILLMAN, D.D.S.
Winston-Salem



Audit for Fiscal Year Ended May 31, 1974

The Officers and Directors
North Carolina Dental Society

We have examined the balance sheets and related statements of income, expenses and fund balances for the General Fund and Relief Fund, together with supporting schedules, of the North Carolina Dental Society for the year ended May 31, 1974. Our examination was made in accordance with generally accepted auditing standards applicable to accounts maintained on the cash basis and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

Inasmuch as the records are maintained on the cash basis of accounting, income earned but not received and expenses incurred but not paid, if any, are not reflected in the accompanying financial statements.

In our opinion, the accompanying financial statements present fairly the financial position of the North Carolina Dental Society at May 31, 1974, and the results of its cash transactions for the year then ended, on a basis consistent with that of the preceding year.

LYNCH, McMILLAN & ROBERTSON

June 21, 1974

Index to Financial Report May 31, 1974

General Fund:

Exhibit A.....	Balance Sheet
Exhibit B.....	Statement of Income, Expenses and Unappropriated Fund Balance
Exhibit C.....	Detail Schedule of Expenses

Relief Fund:

Exhibit D.....	Balance Sheet
Exhibit E.....	Statement of Income, Expenses and Fund Balance

Capital Fund:

Exhibit F.....	Balance Sheet
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Supplementary Information:

Schedule 1.....	Marketable Securities— Relief Fund
-----------------	---------------------------------------

Exhibit A

GENERAL FUND Balance Sheet—May 31, 1974

Assets		
Cash:		
Checking account—First Citizens Bank & Trust Co., Raleigh, North Carolina.....	\$ 7,157.62	
Savings account—First Citizens Bank & Trust Co., Raleigh, North Carolina.....	18,027.57	
Savings accounts—First Federal Savings and Loan Association, Durham, North Carolina.....	30,607.22	
Savings account—Raleigh Savings & Loan Association, Raleigh, North Carolina.....	11,042.73	\$ 66,835.14
Stock in Dental Service Plans Insurance Company, at cost.....		5,000.00
		\$ 71,835.14

Liabilities and Fund Balance

Liabilities.....	\$ —	—
Fund balance:		
Appropriated:		
Prior years:		
Library and History Committee.....	\$ 1,600.00	
For study of central office needs.....	1,000.00	
Insurance consultant services.....	240.00	2,840.00
Unappropriated.....		
		68,995.14
		\$ 71,835.14

GENERAL FUND
Statement of Income, Expenses and Unappropriated Fund Balance
Year ended May 31, 1974

Fund balance—May 31, 1973.....	\$ 49,327.31
Income:	
Dues and penalties collected.....	\$223,335.50
Revenue from Annual Session.....	17,725.00
Revenue from publications.....	9,134.78
Interest on savings.....	2,457.08
Expense reimbursements, refunds and sundry.....	5,517.63
Total income.....	<u>258,169.99</u>
Expenses:	
Dues and penalties remitted:	
American Dental Association.....	\$102,248.50
A.D.A. Relief Fund.....	1,643.00
First District, North Carolina.....	2,840.00
Second District, North Carolina.....	3,720.00
Third District, North Carolina.....	3,745.00
Fourth District, North Carolina.....	2,520.00
Fifth District, North Carolina.....	2,240.00
North Carolina Dental Society Relief Fund.....	20.00
	<u>118,976.50</u>
Central Office expense.....	70,971.16
Journal expense.....	14,911.85
Newsletter	1,947.89
Directory	1,140.30
Delta Dental Plans of North Carolina, Inc.....	321.58
Peer review.....	60.30
Dental Practice Act.....	22.09
NCD-PAC.....	535.00
Executive Committee.....	126.96
DOC.....	312.02
Dental forum.....	48.32
Constitution and Bylaws.....	58.21
Annual Session expense.....	17,185.35
Reimbursement of Delegates and Representatives.....	10,495.49
Contributions.....	120.00
Memberships	1,186.50
Miscellaneous.....	82.64
Total expenses.....	<u>238,502.16</u>
Net income.....	<u>19,667.83</u>
Fund balance—May 31, 1974.....	<u>\$ 68,995.14</u>

PRESIDENT'S REPORT
(Continued from page 12)

ventive Dentistry for the tremendous job of starting the brushing and flossing program in nine counties and publishing a teachers' manual on preventive dentistry. This first appropriation from the legislature covered mostly fluoridation to see that every school child has access to fluoridated water and the addition of five hygienists for screening and education. This Committee had to come up with money to put this on and a lot of free time. (2) The Laboratory Relations Committee for many long, hard meetings. (3) The Continuing Dental Education Council for many meetings. It looks like we will be able to see this organized with a director and working in the very near future. Please vote

for resolution number 11 to support this Council. (4) Robert Cherry and his assistants for excellent, prompt, courteous and cheerful work throughout the year, and especially during these last three weeks leading to this meeting. (5) Dr. Jack Shankle for the tremendous job he has done on the Journal. Our Journal is gaining every day in national recognition. I am proud of our NORTH CAROLINA DENTAL JOURNAL.

I would like to leave you with this thought by De Charden. Some day after we have mastered the winds, the waves, the tides and gravity, we will harvest for God the energies of love and then for the second time in the history of the world man will have discovered fire.

Thank you.

JAMES A. HARRELL

GENERAL FUND
Detail Schedule of Expenses
Year Ended May 31, 1974

Central Office expenses:

Salaries and payroll taxes.....	\$ 40,781.58
Rent	7,850.04
Supplies	2,521.24
Office machine maintenance.....	675.47
Telephone	4,408.89
Postage	1,404.08
Travel—Executive Secretary.....	1,546.11
Hazard insurance.....	266.00
City and county taxes.....	133.00
Newscutting service.....	229.50
Employee insurance.....	1,126.26
Audit	500.00
Legal counsel.....	2,015.06
Addressing service.....	4,822.17
Miscellaneous	509.76
Purchase of office equipment.....	182.00
Employee retirement plan.....	2,000.00
	\$ 70,971.16

Annual Session Expenses:

Arrangements	\$ 6,832.86
Exhibits	3,124.81
Entertainment	3,214.98
House of delegates	709.22
Program	2,863.00
Publicity	413.08
Clinics	36.40
	\$ 17,185.35

RELIEF FUND**Balance Sheet—May 31, 1974****Assets**

Cash:	
Checking account—North Carolina National Bank, Raleigh, North Carolina.....	\$ 278.52
Savings account—First Citizens Bank & Trust Co., Raleigh, North Carolina.....	73.72
On deposit—E. F. Hutton and Company, Inc.....	2,122.42
	\$ 2,474.66
Marketable securities, at cost (market value \$39,685.62).....	58,229.90
	\$ 60,704.56

Liabilities and Fund Balance

Fund balance.....	\$ 60,704.56
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WILLARD PERRY, C.D.T.

VIC EULISS, C.D.T.

TAR HEEL DENTAL STUDIO*Specializing in***QUALITY CROWN AND BRIDGE AND
CERAMIC RESTORATIONS**

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BOX 86

GRAHAM, N. C. 27253

RELIEF FUND
Statement of Income, Expenses and Fund Balance
Year ended May 31, 1974

Fund balance—May 31, 1973.....	\$ 63,673.34
Income:	
A.D.A. Relief Fund.....	\$ 2,585.00
Interest on savings.....	26.35
Interest on corporate bonds.....	1,143.76
Dividends on corporate stocks.....	1,265.14
Net loss on sale of securities.....	(2,202.03)
Reinstatement fees.....	20.00
 Total income.....	 2,838.22
Expenses:	
Relief grants.....	5,075.00
Investment counsel.....	472.00
Audit.....	125.00
Legal.....	135.00
 Total expenses.....	 5,807.00
Net loss	(2,968.78)
Fund balance—May 31, 1974.....	\$ 60,704.56

CAPITAL FUND
Balance Sheet—May 31, 1974

Exhibit F

Assets	
Furniture and equipment, at cost.....	\$ 13,844.11
Liabilities and Fund Balance	
Fund balance—May 31, 1973:	
Investment in fixed assets.....	\$ 13,662.11
Additions:	
1 NT-501 recorder coupler.....	182.00
Fund balance—May 31, 1974.....	\$ 13,844.11

RELIEF FUND
Schedule of Marketable Securities
May 31, 1974

Schedule 1

Corporate Bonds:		Type	Cost	Market Value
Unit	Issue			
\$10,000	American Telephone & Telegraph Co.....	.834-2000	\$ 10,370.76	\$ 10,037.50
5,000	United Aircraft.....	.534-1991	3,771.87	3,100.00
 Total corporate bonds.....				\$ 14,142.63
				\$ 13,137.50
Corporate Stocks (units in shares):				
100	CNA Financial.....	Com.	\$ 2,240.60	\$ 950.00
77	Walt Disney Productions.....	Com.	7,869.25	3,436.12
100	Emhart Corporation.....	Com.	3,898.08	1,725.00
200	Firestone Tire & Rubber Co.....	Com.	5,003.33	3,700.00
6	Hydrox Europe.....	Com.	30.00	12.00
100	Ideal Basic.....	Com.	1,224.00	1,575.00
100	International Harvester.....	Com.	2,923.38	2,512.50
100	Johns-Mansville Corporation.....	Com.	3,626.88	1,675.00
100	National Patent Development.....	Com.	5,900.00	675.00
100	Nucor Corporation.....	Com.	2,177.29	1,825.00
100	TI Corporation.....	Com.	2,872.43	1,687.50
100	Union Carbide	Com.	3,853.00	4,000.00
185	U. S. Tobacco.....	Com.	2,459.03	2,775.00
 Total corporate stocks.....				\$ 44,087.27
				\$ 26,548.12
 Total.....				\$ 58,229.90
				\$ 39,685.62

Report of the Executive Secretary

ROBERT L. CHERRY, JR.

Raleigh

As required by the Bylaws of the North Carolina Dental Society, Article XV, Section 2, herein is submitted my first annual report as Executive Secretary.

Central Office. The Central Office now maintains membership records on 1646 members; bills and collects dues from these 1646 members for the State, the Districts and the ADA; and tries to answer, on a personal basis, any questions received from any of the 1646 members. With the much appreciated assistance of my two staff members, Mrs. Jean Pace and Mrs. Faye Marley, the Central Office has been able to maintain a high degree of efficiency and professionalism. Mrs. Pace, whose chief responsibility is the financial records and Mrs. Marley, whose chief responsibility is the membership records, both perform other tasks which benefit the membership of the Society. Since the last annual report, they have handled registration at Pinehurst and the DOC; aided the committees, districts and officers of the Society; and answered numerous inquiries from the members and the public. Without their skills, the Central Office would all but cease to function.

The facilities of the Central Office have been put to effective use in the past year. Our workroom, which houses our records, mimeograph machine and other office items, has been used to produce revised copies of the North Carolina Dental Society Constitution and Bylaws, District Officers Manual and the Delegates Manual. The Blue Book, the Peer Review Manual of the North Carolina Dental Society and the new VA Fee Schedule were also printed in the Central Office.

The Conference Room has been used for several committee meetings such as the Executive Committee, Relief Committee, Peer Review Committee, Continuing Dental Education Council of North Carolina, NCD-PAC Committee and the Subcommittee on the Industrial Commission.

Therefore, the Central Office continues to supply the needs of the Dental Society in personnel and facilities.

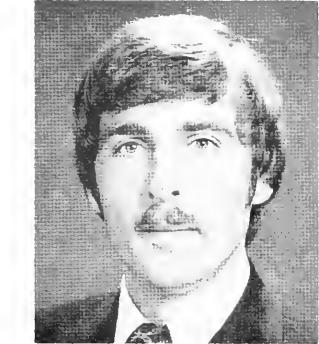
District Societies. I would like to thank each of the districts for the warm reception and fine hospitality I received at each of the district meetings this past fall. This was quite a whirlwind experience after only three months of employment, but I was made to feel right at home at all of the meetings.

After attending the five district meetings, I noticed one item which all districts should be strongly encouraged to implement. That is, new member orientation. A new member orientation session separate from any other function should be set up at each district meeting. This could be a breakfast or discussion type session presented by the district officers, Society Officers and an Insurance Committee representative, for example. I feel early indoctrination on the Dental Society's programs creates early involvement.

District Officers Conference. Even though this was my first attempt at helping to organize the annual District Officers Conference, I felt from some of the feed-back received that the DOC this year was beneficial to many. I understand in the past that the DOC had slipped from a training session into a forum discussion. The DOC was originally begun as a training session for the district officers and I think should continue to provide this service in the future.

Committee Work. One of the duties assigned the Executive Secretary by the Bylaws is "to coordinate the activities of the several committees." Several in Webster's Dictionary is defined as more than two but not very many. The North Carolina Dental Society now has forty-one committees and subcommittees.

Each of these committees can and should be a vital part of



the Society's role in organized dentistry. However, as can be seen from some of the reports in the Blue Book, without direct assignments some of the committees are completely inactive. This should not be the case. Committees do need guidance and definite goals as discussed at the District Officers Conference. The committees must also carry out the instructions and directives of the House of Delegates, the Executive Committee and the President. However, if they receive no definite assignments they need not remain idle. They should be able to hold meetings and generate productive ideas within themselves.

I am available to lend assistance and provide continuity on any committee's assignment or specially selected projects.

Publications. As Managing Editor of the NORTH CAROLINA DENTAL JOURNAL, I undertook a letter writing campaign in December to solicit advertisers for the 1974 Journals. I expect to receive about \$9,000 in revenue by the end of this fiscal year. This amount will cover approximately two-thirds of the expense of the Journal. The Journal will never become entirely self-sufficient through advertising due to the volume of advertising, approximately 35 pages per issue, that would be necessary to pay all expenses.

However, this should not be a point of contention. The NORTH CAROLINA DENTAL JOURNAL, under the superb editorship of Dr. R. J. Shankle, has become a more appealing, more readable and much praised publication.

The membership of the North Carolina Dental Society has a Journal to be proud of, in and outside of North Carolina.

The *Newsletter* continues to be a monthly publication. It serves a most useful purpose by keeping the membership informed on the Society's affairs and activities.

Membership. Since the last annual report of the Executive Secretary, membership in the North Carolina Dental Society has increased from 1,588 to 1,646. This figure does not include the 139 students at the University of North Carolina, School of Dentistry who are now full student members of the North Carolina Dental Society.

By direction of the 1973 House of Delegates and with the assistance of Dr. Gerald M. Cathey, all dental students at the University of North Carolina were contacted and urged to join the Dental Society. The student members now receive the Journal, the *Newsletter* and are eligible for two insurance programs.

Three member services were added since the last House of Delegates Meeting. First, new members are now immediately sent the new members information packet as soon as they become members. Previously, this packet was carried to them at the annual district meetings which in some cases was months after they were members. The other two new services instituted are handling of Society sponsored trips by the Central Office and J. C. Systems, an ethical, effective collection service endorsed by 23 other dental societies besides North Carolina.

Annual Session. Since this report appears to be a description

(Continued on page 18)

Report of the Editor-Publisher

ROBERT J. SHANKLE, D.D.S.
Chapel Hill

The Editor-Publisher's report to the House of Delegates last year appeared subsequent to only one publication of our Journal in its new design and makeup. Since that time, four additional issues have been published, and presently the April 1974 Journal is in the page proof stage of development.

The objectives as stated in that report last year are reviewed as follows: (1) To produce a superior State Dental Journal, (2) To promote the State of North Carolina as well as the profession, (3) Include scientific and human interest articles for publication, (4) To be used as a forum to discuss problems of the profession and as a medium to support our profession and promote the health of the people of North Carolina, (5) That means be explored to make students affiliate members of the North Carolina Dental Society, (6) That the District Editors be elected to serve more than a one year term in order to promote continuity in the development of the Journal, and (7) That the Journal not be dependent upon advertising in order to accomplish the objectives of quality and attractiveness of the publication. Additional suggestions have been made as follows: (1) It was suggested at the House of Delegates Meeting that advertisements be sought that deal more with the preventive aspects of dentistry, and (2) It was suggested at the District Officers Conference that District Editors take office January 1 following their election at the Fall District Meetings. This latter suggestion permitted the outgoing editor to write the report of the Fall District Meetings for publication in the January issue of the Journal.

All of these objectives have been realized with the exception of obtaining preventive dentistry advertisements. This has been disappointing, although the Executive Secretary and Advertising Editor have attempted to achieve this for the Journal.

The North Carolina Dental Society has supported the efforts of your Editor towards improving the Journal by approving the necessary funding. For this we are grateful.

The make-up or "paste-up" of the Journal has been performed by your Editor. Though inexperienced in this area of journalism it has been a rewarding endeavor. In the opinion of your Editor, this is the responsibility of one closely associated with the Dental Society and preferably not the responsibility of a lay person. This phase of the production of your Journal consumes approximately 16-24 hours for each issue and, inci-



dently, for the Dental Society this provides a savings of approximately \$600 yearly. It would cost this amount or more to employ a lay person to provide the same but unequal service.

Edwards and Broughton, our printer, has been most helpful in the publication of our Journal. Mr. Thomas Graham and Mr. Lloyd Turnage of Edwards and Broughton have been especially helpful in suggestions as to design, type, in proof-reading, and in scheduling of productions.

Disappointments have been few but major in the eyes of your Editor. These are: (1) Weight of paper in two issues was inadvertently modified which distracted from attractiveness, (2) Reproduction of color has been unsatisfactory with two covers, (3) Some District Editors have failed to submit material for given issues, and (4) Many groups or persons responsible for submitting copy have failed to adhere to closing dates which delays publication and receipt of the Journal by the membership until late in the month of publication.

The first two of these disappointments have been solved. The Dental Society must deal with the latter two.

President-Elect Horton has been requested to appoint an Assistant Editor for: (1) Assistance to the Editor, and (2) Provide backup support to constantly insure production and continuing quality of production. The Managing Editor cannot serve in this capacity as time does not permit this service to the Society. He is responsible for the *Newsletter* and publication of various programs and brochures which originate from the Central Office.

Comments as to the Journal in its new format have been most favorable at the state and national level. Comments from abroad have been received as well.

We would like to urge your continuing support towards the production of the NORTH CAROLINA DENTAL JOURNAL.

EXECUTIVE SECRETARY

(Continued from page 17)

of my "firsts," the Annual Session in May will be my first also. I met with the Annual Sessions Committee at Pinehurst in January and began laying the ground work for the May meeting.

The Pinehurst Hotel, formerly the Carolina, still does not have a separate exhibition hall. So once again this year, the commercial exhibits will be set up in the North Room, the South Room, the Dogwood Room, along the main hallway and in the Cardinal Ballroom Lobby.

The exhibit spaces, which number 85, were completely sold by January 21, 1974 and will bring in a total revenue of \$17,015.

Due to the extent of the commercial exhibits, meeting rooms and floor space are at a premium. Allied groups desiring to meet during the Annual Session were assigned meeting space and time in the most equitable manner possible.

Finances. As of March 1, 1974, \$100,560 of the projected income for fiscal year 1973-74 of the \$102,800 from dues had been received. After three quarters of the fiscal year, spending appears to be within the bounds of the approved budget. By the end of the fiscal year on June 1, the Society should have a surplus of approximately \$20,000-\$30,000 which can be used to build the unappropriated reserve. It is an accepted rule of thumb that a voluntary professional association should maintain a reserve at least equal to one year's operating expenses for unexpected contingencies. The surplus will go toward building this reserve which has been non-existent in the last few years.

Thanks. My sincere thanks to the Central Office staff for all of their fine work. The Society is fortunate in having employees of their capabilities and talents in the Central Office.

My thanks go also to the officers and members of the Society. My job has been made easier by their understanding and support.

Minutes of Executive Committee



W. A. CURRENT, D.D.S.
Chairman

PINEHURST, NORTH CAROLINA

May 16, 1973

Call to Order. The Executive Committee convened at The Carolina in Pinehurst, May 16, 1973, at the close of the 117th Annual Session. Dr. William A. Current, chairman, called the meeting to order and Dr. Robert B. Litton led in prayer.

Roll Call. Officers present: James A. Harrell, president; Charles W. Horton, president-elect; Gerald M. Cathey, vice president; J. Harry Spillman, secretary-treasurer; and Robert J. Shankle, editor-publisher.

Committee members present: William A. Current, chairman; R. B. Barden, Frederick G. Hasty, and Joseph M. Johnson, immediate past president.

Staff member present: Andrew M. Cunningham, executive secretary.

Retiring officers and members present: Robert B. Litton, Wade H. Breeland and Fay H. Culbreth.

Introduction of New Members. Dr. Harrell announced the appointment of Dr. William A. Current as chairman of the Executive Committee for 1973-74 and the appointment of Dr. R. B. Barden as a member of the committee for a term of three years.

He welcomed to the committee Dr. Charles W. Horton, newly-elected president-elect; and Dr. Gerald M. Cathey, newly-elected vice president. He noted that Dr. J. Harry Spillman had been elected to succeed himself as secretary-treasurer and would continue to serve on the committee.

He also noted that the terms of Dr. Wade H. Breeland, Dr. Robert B. Litton and Dr. Fay H. Culbreth had expired and expressed appreciation to them for the fine service they had rendered the Society as members of the committee.

Approval of Minutes. The minutes of March 30, 1973, were approved on motion by Dr. Harrell, seconded by Dr. Spillman.

Financial Report. On motion by Dr. Johnson, seconded by Dr. Spillman, the financial report of the secretary-treasurer dated April 30, 1973, was received for information.

Appointment of Editor-Publisher. On motion by Dr. Harrell, seconded by Dr. Spillman, Dr. Robert J. Shankle was re-appointed editor-publisher for 1973-74.

1975 Annual Session. It was noted that the Society in General Session voted to return to The Carolina in Pinehurst for its annual session in 1975. On motion by Dr. Spillman, seconded by Dr. Johnson, the dates of May 11-14, 1975 are to be confirmed on a tentative basis with The Carolina for the 119th Annual Session, until after the Fifth Trustee District Caucus to be held in the Fall of 1973.

Legal Counsel. On motion by Dr. Spillman, seconded by Dr.

May 16, 1973	January 5, 1974
June 9, 1973	January 6, 1974
September 14, 1973	March 29, 1974
December 9, 1973	March 30, 1974

Hasty, the firm of Joyner and Howison of Raleigh was retained as legal counsel for the Society for 1973-74.

Finance Committee. Dr. Harrell announced the appointment of the following to the Finance Committee. Dr. Spillman, chairman; Dr. Johnson and Dr. Current.

Representation to Delta Dental Plans Meeting. Dr. Spillman moved that Dr. Glenn F. Bitler be authorized to represent the Society at the Delta Dental Plans Association Program Conference and Annual Membership Meeting, June 20-22, 1973, at Pheasant Run Lodge, St. Charles, Illinois, and that he be reimbursed for first-class round trip air fare and \$40 per diem for up to 4 days. Dr. Barden seconded the motion and it was carried.

Next Meeting. Dr. Harrell moved that the next meeting of the Executive Committee be held at High Meadows Inn, Roaring Gap, N. C. at 9:00 a.m. Dr. Johnson seconded the motion and it was carried.

Dr. Harrell moved that Mr. Cunningham be invited to attend the next meeting of the Executive Committee at High Meadows Inn on June 9 and that the expenses of Mr. and Mrs. Cunningham for the trip be paid by the Society. Dr. Barden seconded the motion and it was carried.

Resignation of Executive Secretary. Mr. Andrew M. Cunningham tendered his resignation as executive secretary of the Society effective May 31, 1973. On motion by Dr. Spillman, seconded by Dr. Barden, Mr. Cunningham's resignation was accepted subject to the following conditions:

1. In addition to Mr. Cunningham's regular salary through May 31, 1973, the Society will pay to Mr. Cunningham on or before May 31, 1973 the following:
 - a. Additional compensation equivalent to salary for one month.
 - b. Compensation for accrued vacation time of twenty-six (26) working days.
2. Mr. Cunningham will be employed by the Society as consultant to the Society for two years from and after May 31, 1973 under the following terms:
 - a. Salary for the first year shall be at the rate of 40 per cent of his present salary. Salary for the second year shall be at the rate of 30 per cent of his present salary.
 - b. Salary shall be paid in equal monthly installments.
 - c. His duties as consultant to the Society shall not interfere with his full or part-time employment elsewhere should he undertake the same.
 - d. His death at any time during the two year period of his employment as consultant to the Society shall terminate such employment and any salary obligations therefor by the Society shall cease effective with his salary for the month of his death.

e. In addition to the salary as set forth above the Society will continue the payment of the premiums for him and his wife on its group hospitalization policy provided the insurance carrier finds his continued coverage under that policy acceptable. In the event the insurance carrier does not agree to such continued coverage, in lieu thereof the Society will make payment of an amount equivalent to such premium attributable to him and his wife either directly to him or his benefit to such hospital insurance carrier as he may contract with.

Dr. Harrell moved that Mr. Cunningham be honored for his 18 years of service as executive secretary at the annual banquet on May 14, 1974 during the 118th Annual Session and that the expenses for Mr. and Mrs. Cunningham for the trip be paid by the Society. Dr. Hasty seconded the motion and it was carried.

Appointment of Executive Secretary. Dr. Harrell moved that Mr. Robert L. Cherry be appointed executive secretary for one year effective June 1, 1973 and that his salary be paid from May 21, 1973. Dr. Hasty seconded the motion and it was carried.

N. C. Council on Continuing Education. Dr. Harrell moved that Dr. J. Harry Spillman be appointed to represent the Society on the N. C. Council on Continuing Education. Dr. Barden seconded the motion and it was carried.

Thanks. Dr. Johnson thanked the members of the Executive Committee for their support during his administration and expressed his appreciation for the fine services they rendered during the past year.

Adjournment. There being no further business the meeting was adjourned.

J. HARRY SPILLMAN, D.D.S.
Secretary-Treasurer

ROARING GAP, NORTH CAROLINA

June 9, 1973

Call to Order. The Executive Committee convened at the High Meadows Inn, Roaring Gap, North Carolina, on Saturday, June 9, 1973. Dr. William A. Current, chairman, called the meeting to order at 9:18 a.m. Dr. Joseph M. Johnson led in prayer.

Roll Call. Officers present: James A. Harrell, president; Charles W. Horton, president-elect; Gerald M. Cathey, vice president; J. Harry Spillman, secretary-treasurer; Robert J. Shanks, editor-publisher.

Executive Committee members present: William A. Current, chairman; Joseph M. Johnson, immediate past president; Frederick G. Hasty, R. B. Barden.

Staff members present: Robert L. Cherry, executive secretary; Andrew M. Cunningham, consultant to executive secretary.

Others present: Ralph D. Coffey, speaker-of-the-house.

Approval of Minutes. The minutes of May 16, 1973, were approved on motion by Dr. Current, seconded by Dr. Johnson.

Financial Report. The financial report for the fiscal year ending May 31, 1973, was received for information.

Line of Credit. Dr. Johnson moved that a \$35,000 line of credit be established to be used in the event the Central Office or Delta Dental Service needed extra funds. Dr. Hasty seconded the motion and it was carried.

ADA Delegation. Dr. Current moved that the chairman of the North Carolina Delegation to the ADA Annual Session be allowed to fill vacant alternate delegate positions at the meeting in the same manner as last year. Dr. Harrell seconded the motion and it was carried.

Authorization to Sign Checks. On motion by Dr. Hasty, seconded by Dr. Barden, N. C. Dental Society fund's check signing and deposit withdrawal authorization for Robert L. Cherry, executive secretary, was approved.

Continuing Dental Education Council of North Carolina. On motion by Dr. Hasty, seconded by Dr. Harrell, the *Bylaws* of the Continuing Dental Education Council of North Carolina were approved.

Exhibit Space. Dr. Johnson moved that a formal inquiry be made to The Carolina Hotel in Pinehurst concerning the exact

amount of exhibit space at the next annual session. Dr. Hasty seconded the motion and it was carried.

Review of Resolutions Adopted by 1973 House of Delegates:

Resolution 4—

Dr. Harrell moved that a letter be written to the Chairman, Annual Sessions Committee, and inform him that due to lack of exhibit space at Pinehurst, it is not feasible to offer exhibit space to various schools with dental education programs at the annual session. The motion was seconded by Dr. Hasty and carried.

Dr. Barden moved that a letter be written to each district president with a copy to each district program chairman requesting them to contact the schools in their district offering dental education programs and allow them to exhibit at the annual district meetings. Dr. Hasty seconded the motion and it was carried.

Resolution 10—

It was requested that the Central Office coordinate with Drs. Cathey and Shankle concerning student membership-benefits, dues and the NORTH CAROLINA DENTAL JOURNAL.

Resolution 12—

On a motion by Dr. Harrell, seconded by Dr. Hasty, \$225 for a survey by the Committee on Hospital Dental Service was approved.

Resolution 29—

Dr. Horton moved that Resolution 29 be referred to the chairman, Dental Care Programs Committee, with the purpose to be that the salary structure of dentists in state institutions be restored to complete equality with physicians and that copies of this letter and a previous letter concerning this matter be sent to the Governor and Secretary of the Department of Human Resources. Dr. Hasty seconded the motion and it was carried.

Resolution 43—

Dr. Harrell moved that the Dental Practice Act Committee be directed to set up an amendment to the Dental Practice Act of North Carolina to allow research to be done by the UNC School of Dentistry on and off campus in the event the N. C. State Board of Dental Examiners does not allow Phase II to be completed and that a report by this committee be given at the next Executive Committee meeting at 9:00 a.m., September 14, Timme Plaza, Wilmington, North Carolina. Dr. Barden seconded the motion and it was carried.

Investment Counsel. On a motion by Dr. Harrell, seconded by Dr. Johnson, the hiring of investment counsel being referred to Dr. Hand, chairman of Relief Committee, was approved.

ASAE. On a motion by Dr. Spillman, seconded by Dr. Hasty, membership and payment of dues in the American Society of Association Executives for the Executive Secretary was approved.

Dates. On a motion by Dr. Harrell, seconded by Dr. Barden, the dates of the District Officers Conference were set for December 8 and 9, 1973, in Raleigh.

On a motion by Dr. Horton, seconded by Dr. Harrell, the dates of December 7 and 8, 1974, were approved for the 1974 District Officers Conference in Raleigh.

Dr. Harrell moved that the next annual House of Delegates meeting be Friday, March 29, 1974 through March 31, 1974, in Raleigh with the opening session at 9:00 p.m., Friday, March 29, 1974. Dr. Horton seconded the motion and it was approved.

On a motion by Dr. Harrell, seconded by Dr. Barden, the dates of January 5 and 6, 1974, were approved for the Annual Session Committee in Pinehurst, North Carolina at The Carolina Hotel.

New Business. Dr. Harrell moved that candidates be allowed to announce their candidacy in the *Newsletter*. Dr. Horton seconded the motion and it was carried.

Dr. Horton moved that Dr. Larry Dorton be allowed to handle the July, 1974 trip to Spain and that the Executive Committee assign other counsel after that.

Adjournment. The meeting was adjourned at 12:40 p.m.

J. HARRY SPILLMAN, D.D.S.
Secretary-Treasurer

WILMINGTON, NORTH CAROLINA
September 14, 1973

Call to Order. The Executive Committee convened on Friday, September 14, 1973, in Wilmington, North Carolina at the Wilmington Hilton. Dr. William A. Current, chairman, called the meeting to order at 9:11 a.m. Dr. James A. Harrell led in prayer.

Roll Call. Officers present: James A. Harrell, president; Charles W. Horton, president-elect; Gerald M. Cathey, vice president; J. Harry Spillman, secretary-treasurer; Robert J. Shankle, editor-publisher.

Executive Committee members present: William A. Current, chairman; Joseph M. Johnson, R. B. Barden, Frederick G. Hasty.

Staff member present: Robert L. Cherry, executive secretary.

Others present: Harold E. Maxwell, chairman, North Carolina Dental Political Action Committee; Fred H. Miller, chairman, Dental Practice Act Committee; Earl Fitzgerald, Equitable Life Assurance Society of the United States.

Approval of Minutes. The minutes of June 9, 1973, were approved on motion by Dr. Spillman, seconded by Dr. Johnson.

Financial Statement. On motion by Dr. Harrell, seconded by Dr. Barden, the financial report of the secretary-treasurer dated August 31, 1973, was received for information.

Budget 1973-74. 1. On a motion by Dr. Harrell, seconded by Dr. Spillman, the authority for the Executive Secretary to invest dues receipts in government securities or guaranteed bonds was approved.

2. Dr. Harold Maxwell, chairman, North Carolina Dental Political Action Committee, requested that \$535.00 be added to the N. C. Dental Society budget to cover office costs incurred by the Committee. Dr. Maxwell also requested that the assessment for NCD-PAC dues be added to the Society's yearly statement of dues.

Dr. Hasty moved that the method used in 1972 of putting a separate statement for NCD-PAC dues in the same envelope with the N. C. Dental Society's dues statement be used and that the addition of the NCD-PAC dues assessment to the N. C. Dental Society's dues statement be reviewed next year. The \$535.00 for office expenses should be added to the budget. Dr. Barden seconded the motion and it was passed.

3. Mr. Earl Fitzgerald, Equitable Life Assurance Society of the United States, answered questions concerning a plan for Central Office retirement program. Dr. Barden moved that the amounts indicated in the budget for a retirement program for the Central Office staff be approved and that Equitable Life Assurance Society of the United States be the carrier. A trusteeship of three persons is to be set up by the Executive Committee, one member from the Central Office and two members of the N. C. Dental Society, and subsequent trustee appointments will be made by the Executive Committee. Dr. Spillman seconded the motion and it was passed.

4. Dr. Harrell moved that the N. C. Dental Society pay the expenses of the Editor-Publisher for his attendance at the ADA Annual Session and reimburse him \$500.00 annually to defray his out-of-pocket expenses in connection with the JOURNAL. Dr. Spillman seconded the motion and it was passed.

On motion by Dr. Hasty, seconded by Dr. Barden, a budget totalling \$114,414.00 for fiscal 1973-74 presented by the Central Office and Finance Committee and amended by the Executive Committee was approved. A copy is attached to these minutes.

Recess. The Executive Committee recessed for lunch at 12:15 p.m. and reconvened at 1:45 p.m.

Dental Practice Act Committee. Dr. Fred H. Miller, chairman, Dental Practice Act Committee, reported on the actions of the Dental Practice Act Committee concerning the June 9 Executive Committee resolution directing the Dental Practice Act Committee to set up an amendment to the Dental Practice Act of North Carolina to allow research to be done by the UNC

School of Dentistry on and off campus. Dr. Miller presented the proposed amendment:

Section 90-29 (c) (12):

Any act or acts performed by auxiliary personnel with a specific research project approved by the North Carolina State Board of Dental Examiners which would otherwise be in conflict with the State Dental Practice Act. Such practice when performed as part of a research project must be under the supervision of a dentist who is licensed to practice dentistry in North Carolina. The practice of dentistry by such auxiliaries when part of a specific research project can occur at any location, private or public, within the state. Additionally, to be approved a research project must present evidence of the following criteria to said Board of Dental Examiners: 1) a scientifically sound research protocol, 2) credentials of the supervising agency showing the resources and expertise to perform such research, 3) protection of the public including guidelines governing research on human subjects to be similar to federal government requirements and 4) the willingness to disclose to the public or any interested parties the findings of such research. The said Board of Dental Examiners shall complete their study and discussion and shall formally approve or disapprove such a research proposal within 60 days. Disapproval shall be accompanied by an explanation to the agency proposing the research stating the specific reasons for which the proposal has failed to meet the above mentioned criteria.

Dr. Hasty moved that the amendment to the Dental Practice Act presented by Dr. Miller be submitted to the State Board of Dental Examiners for their information and comment. Dr. Barden seconded the motion and it was approved.

Executive Committee Minutes. Dr. Harrell moved that the Editor-Publisher prepare a summary of the minutes of each Executive Committee meeting and this summary be published in the *Newsletter*. The motion was seconded by Dr. Barden and carried.

American Fund for Dental Education. Dr. Hasty moved that the Executive Committee support the American Fund for Dental Education and recommended the Dental Society support the AFDE through the use of the *Newsletter* and/or the *JOURNAL*. Dr. Spillman seconded the motion and it was carried.

Plaques. Dr. Spillman moved that appropriate plaques be obtained for Mrs. John B. Chase, Mr. Ernest B. Messer, Commissioner John Ingram, Superintendent Craig Phillips, Secretary David Flaherty, Mr. Andrew M. Cunningham and Dean James W. Bawden for presentation to them. Dr. Hasty seconded the motion and it was passed.

PSRO. Dr. Hasty moved that a continuing effort be made to have a dentist appointed as a member on the state Peer Standard Review Organization set up by the Department of HEW. Dr. Horton seconded the motion and it was carried.

Blue Cross/Blue Shield. Dr. Spillman moved that a request from Mrs. Franklin Bungardner to return to the Society's Blue Cross and Blue Shield Group Plan be denied due to detrimental economic burdens which would come to bear on other members of the Society. Dr. Hasty seconded the motion and it was passed.

Dental Society Sponsored Trips. On motion by Dr. Johnson, seconded by Dr. Horton, the trip to Spain arranged with Arthur's Travel Service for members of the N. C. Dental Society on June 28, 1974, was approved.

On motion by Dr. Hasty, seconded by Dr. Barden, the Executive Secretary was directed to contact other state dental societies and ask them how they handled their trips.

Dr. Hasty moved that Dr. Hesmer be informed that his trip to Switzerland could not be endorsed by the Dental Society. The motion was seconded by Dr. Barden and carried.

DOC and House of Delegates. Dr. Harrell moved that the 1973 District Officer's Conference and the 1974 House of Delegates be held at the Velvet Cloak Inn in Raleigh on the dates

previously set by the Executive Committee. The motion was seconded by Dr. Hasty and carried.

Sarner Report. Dr. Harrell moved that Dr. Nelson be directed to give a summary of the Sarner insurance report and the follow-up to this report and that the summary be printed in the *Newsletter* or N. C. DENTAL JOURNAL. Dr. Horton seconded the motion and it was approved.

Dental Student Insurance. On motion by Dr. Johnson, seconded by Dr. Barden, the Executive Secretary was given the authority to discuss with Mr. Slade Crumpton Society insurance programs for student members.

Next Meeting. The Committee agreed to meet next on Friday, December 7 at the Velvet Cloak Inn, Raleigh, at 9:00 p.m.

Adjournment. The meeting was adjourned at 4:37 p.m.

J. HARRY SPILLMAN, D.D.S.
Secretary-Treasurer

BUDGET
NORTH CAROLINA DENTAL SOCIETY
1973-74

Approved by the Executive Committee September 14, 1973

ESTIMATED INCOME	BUDGETED INCOME
State Dues	\$102,800.00
Annual Session	16,265.00
Publications	
Journal	\$ 9,000.00
Directory	38.00
	9,038.00
Interest & Dividends	
Interest on Savings	500.00
Interest on Bonds	—0—
Dividends on Stock.....	500.00
Net Gain from Sale of Securities.....	—0—
Expense Reimbursements	900.00
Miscellaneous	50.00
TOTAL	\$129,553.00

BUDGET
NORTH CAROLINA DENTAL SOCIETY
1973-74

Approved by the Executive Committee September 14, 1973

EXPENSES	BUDGETED EXPENSES
Central Office Expense	
Salaries & Payroll Taxes.....	\$40,611.00
Salaries (Temporary)	2,000.00
Rent	7,850.00
Supplies	3,000.00
Office Machine Maintenance.....	850.00
Telephone	4,200.00
Postage	1,400.00
Travel-Executive Secretary.....	1,500.00
Hazard Insurance	200.00
City & County Taxes.....	150.00
Newspaper Service	216.00
Employee Insurance	850.00
Audit	500.00
Legal Counsel	3,000.00
Investment Counsel	452.00
Addressing Service	700.00
Miscellaneous	300.00
Equipment	250.00
Petty Cash	200.00
Retirement (Executive Secretary)....	1,000.00
Retirement (Employees)	1,000.00
Group Life Insurance (Executive Secretary)	160.00
	\$ 70,389.00

Annual Session \$ 13,500.00
Publications

Journal	\$13,400.00
Newsletter	2,500.00
Directory	1,000.00
	16,900.00
Committees & Conferences	
Delta Dental Plans, Inc.....	\$ 365.00
NCD-PAC	535.00
Executive Committee	—0—
District Officers Conference.....	500.00
Hospital Dental Service.....	225.00
	1,625.00

Reimbursement of Officers, Delegates & Representatives to Conferences	
Conferences	\$ 2,600.00
Delegates	5,500.00
Headquarters Suite	2,000.00
President	500.00
	10,600.00

Contributions	200.00
Memberships	850.00
Miscellaneous	350.00
TOTAL	\$114,414.00
Contingent Fund	15,139.00
	\$129,553.00

RALEIGH, NORTH CAROLINA

December 9, 1973

Call to Order. The Executive Committee convened on Sunday, December 9, 1973, in Raleigh, North Carolina at the Central Office. Dr. William A. Current, Chairman, called the meeting to order at 9:26 a.m. Dr. Charles W. Horton led in prayer.

Roll Call. Officers present: James A. Harrell, president; Charles W. Horton, president-elect; Gerald M. Cathey, vice president; J. Harry Spillman, secretary-treasurer; Robert J. Shankle, editor-publisher.

Executive Committee members present: William A. Current, chairman; Joseph M. Johnson, R. B. Barden, Frederick G. Hasty. Staff member present: Robert L. Cherry, Executive Secretary.

Approval of Minutes. The minutes of September 14, 1973, were approved on motion by Dr. Horton, seconded by Dr. Barden.

Financial Report. On motion by Dr. Harrell, seconded by Dr. Spillman, the financial report of the secretary-treasurer dated November 30, 1973, was received for information.

Dental Practice Act Amendment. Discussion was held concerning the letter received from Dr. Cecil A. Pless, President of the N. C. State Board of Dental Examiners, dealing with the proposed change to the Dental Laws of N. C. to allow auxiliary research and the meeting between the State Board and the Executive Committee on November 16, 1973, in Greensboro on the same subject.

Upon completion of the discussion and on motion by Dr. Harrell, seconded by Dr. Horton, it was approved that Mr. Robert C. Howison, the Society's legal counsel, be instructed to have ready for presentation to the Executive Committee at their meeting on January 5, 1974, in Pinehurst the finalized version of the proposed amendment to the Dental Laws of N. C. dealing with auxiliary research.

Peer Review. Discussion was held concerning Dr. James H. Lee's report of the meeting of the N. C. Dental Society State Peer Review Committee with the dental specialty groups.

On motion by Dr. Hasty, seconded by Dr. Harrell, the amendment to the N. C. Dental Society State Peer Review Manual submitted by the N. C. Dental Society Peer Review Committee on page 7, section 4, line 8 to add "... or in case of a specialty, the State Review Committees designated Specialty Sub-committee" was approved.

I. C. Systems, Inc. A presentation was given by Mr. Ronald Wermes of I. C. Systems, Inc., a computerized collection service. Final action on approval of this service for the membership is to be taken at the January 5, 1974, meeting of the Executive Committee.

Executive Secretary Contract. An employment contract for the Executive Secretary was approved on a motion by Dr. Johnson, seconded by Dr. Harrell. A copy of the contract is attached to these minutes.

Donation. On a motion by Dr. Spillman, seconded by Dr. Hasty, the Executive Secretary was instructed to write a letter to the Greater Raleigh Dental Hygienists Society explaining that the N. C. Dental Society was sorry but they could not donate funds for Children's Dental Health Week because they would then have to show equal consideration to other groups across the state.

Plaques. The sum of \$350.00 was approved to buy N. C. Dental Society plaques for presentation to persons previously cited at the September 14, 1973, meeting on a motion by Dr. Johnson, seconded by Dr. Harrell.

Old Business. Dr. Johnson moved that Mr. Robert C. Howison be instructed to remove the Specialty Licensure Bill from consideration by the N. C. State Legislature. Dr. Hasty seconded the motion and it was carried.

New Business. The proceedings and recommendations of the District Officers Conference held on December 8, 1973, were discussed. A copy of the minutes of that conference is attached.

Dr. Harrell moved that the Executive Secretary refer the recommendations to the appropriate committees. The motion was seconded by Dr. Spillman and carried.

On motion by Dr. Spillman, seconded by Dr. Hasty, reimbursement of state officers for tickets to functions purchased at all future annual district meetings was approved.

Next Meeting. The committee agreed to meet next on Saturday, January 5, 1974, at the Carolina Hotel, Pinehurst, at 8:30 p.m.

Adjournment. The meeting was adjourned at 1:15 p.m.

J. HARRY SPILLMAN, D.D.S.
Secretary-Treasurer

PINEHURST, NORTH CAROLINA

January 5, 1974

Call to Order. The Executive Committee convened on Saturday, January 5, 1974, in Pinehurst, North Carolina, at the Pinehurst Hotel. Dr. William A. Current, chairman, called the meeting to order at 10:10 p.m. and Dr. Current led in prayer.

Roll Call. Officers present: James A. Harrell, president; Charles W. Horton, president-elect; Gerald M. Cathey, vice president; J. Harry Spillman, secretary-treasurer; Robert J. Shankle, editor-publisher.

Executive Committee members present: William A. Current, chairman; Joseph M. Johnson, R. B. Barden, Frederick G. Hasty.

Staff member present: Robert L. Cherry, Executive Secretary.

Others present: Darden J. Eure, Jr., chairman, Annual Session Committee.

Approval of Minutes. The minutes of December 9, 1973, were approved on motion by Dr. Harrell, seconded by Dr. Cathey.

Dental Practice Act Amendment. As instructed by the Executive Committee at the December 9, 1973 meeting, copies of the amendment to the Dental Laws of North Carolina dealing with auxiliary research prepared by Mr. Robert C. Howison, North Carolina Dental Society legal counsel, were distributed to the members of the Executive Committee by Mr. Robert Cherry. Dr. Hasty moved that no action be taken on this amendment until the next meeting of the Executive Committee. Dr. Harrell seconded the motion and it was passed.

Uniform Insurance Forms. Dr. Barden moved that the uniform insurance form approved by the Council on Dental Care Programs of the American Dental Association be printed in the

Newsletter and members of the Society be urged to use it. Dr. Hasty seconded the motion and it carried.

I. C. Systems. The official endorsement of I. C. Systems, Inc. for use by the members of the North Carolina Dental Society was approved on a motion by Dr. Harrell, seconded by Dr. Spillman.

Non-Related Income. Dr. Barden moved that any money received by the North Carolina Dental Society from non-related income would be allocated by the Executive Committee after it was received and until it was allocated, a separate Project Fund should be set up to maintain these monies. Dr. Horton seconded the motion and it was carried.

Travel Programs. On a motion by Dr. Hasty, seconded by Dr. Horton, it was approved that any future Society sponsored trip should be presented by the Executive Secretary to the Vice President who in turn would present them to the Executive Committee for their choice.

Rowan County Dental Society Letter. On a motion by Dr. Barden, seconded by Dr. Cathey, a letter from the Rowan County Dental Society was received for information.

Recognition. Dr. Harrell moved that an appropriate resolution be drawn up in recognition of Ms. Miriam Daughtry for her years of service to dental auxiliary education and that a plaque be presented to her at the 1974 House of Delegates meeting. Dr. Barden seconded the motion and it carried.

Annual Session. Darden J. Eure, Jr., chairman of the Annual Session Committee, presented the budget for the 1974 Annual Session.

On a motion by Dr. Hasty, seconded by Dr. Barden, \$225.00 was approved and added to the budget to cover refreshments and flowers for the president.

Dr. Hasty moved that the Dental Society pay the cost of the rental of two parlors in two villas to be used for committee meetings at the Annual Session. Dr. Horton seconded the motion and it was passed.

A budget of \$13,836.00 for the 1974 Annual Session of the North Carolina Dental Society was approved on a motion by Dr. Spillman, seconded by Dr. Johnson. A copy of the budget is attached to these minutes.

Next Meeting. On a motion by Dr. Harrell, seconded by Dr. Spillman, the next meeting of the Executive Committee was set for 10:00 a.m., Sunday, January 6.

Adjournment. The meeting was adjourned at 1:15 a.m., January 6.

J. HARRY SPILLMAN, D.D.S.
Secretary-Treasurer

1974 ANNUAL SESSION BUDGET

Approved by the Executive Committee January 5, 1974

Arrangements	\$ 3,900.00
Clinics, Table	—0—
Entertainment	
Banquet	\$ 200.00
Receptions (2)	1,200.00
Dance	400.00
Entertainment	1,000.00
Decorations	600.00
Exhibits	3,400.00
Monitor	2,313.00
Program	—0—
Publicity	2,832.00
Sports	496.00
Hospitality	—0—
House of Delegates	225.00
Memorial Service	570.00
	—0—
	\$ 13,836.00

DISTRICT OFFICERS CONFERENCE

Velvet Cloak, Dec. 7 and 8

PINEHURST, NORTH CAROLINA

January 6, 1974

Call to Order. The Executive Committee convened on Sunday, January 6, 1974, at the Pinehurst Hotel in Pinehurst, North Carolina. Dr. William A. Current, chairman, called the meeting to order at 10:25 a.m. Dr. James A. Harrell led in prayer.

Roll Call. Officers present: James A. Harrell, president; Charles W. Horton, president-elect; Gerald M. Cathey, vice president; J. Harry Spillman, secretary-treasurer; Robert J. Shanks, editor-publisher.

Executive Committee members present: William A. Current, chairman; Joseph M. Johnson, R. B. Barden, Frederick G. Hasty.

Staff member present: Robert L. Cherry, Executive Secretary.

Dental Practice Act Amendment. The amendments to the Dental Laws of North Carolina distributed to the members of the Executive Committee at the January 5, 1974, Executive Committee Meeting were discussed.

Dr. Johnson moved that pursuant to resolution 43-1973-H adopted by the 1973 N. C. Dental Society House of Delegates and subject to the approval of the Dental Practice Act Committee, the Executive Committee endorses in principle these amendments prepared by N. C. Dental Society legal counsel, but submits these amendments to the 1974 House of Delegates for final action due to the highly controversial nature of the issue and the possibility of creating divisiveness within the profession. Dr. Hasty seconded the motion and it passed. A copy of the amendments is attached to these minutes.

The Executive Secretary was instructed to send a letter containing the resolution passed by the Executive Committee and a copy of the proposed amendments to all members of the N. C. Dental Society House of Delegates, Dr. Cecil A. Pless, Dr. Ralph D. Coffey and Dr. James W. Bawden.

Next Meeting. The Committee agreed to meet next on Sunday, March 31, upon adjournment of the House of Delegates at the Velvet Cloak Inn in Raleigh, N. C.

Adjournment. The meeting was adjourned at 12:10 p.m.

J. HARRY SPILLMAN, D.D.S.
Secretary-Treasurer

A BILL TO BE ENTITLED

AN ACT AMENDING SECTION 90-233 OF THE GENERAL STATUTES WITH REGARD TO THE PRACTICE OF DENTAL HYGIENE.

The General Assembly of North Carolina enacts:

Section 1. Section 90-233(c) of the General Statutes is hereby amended by adding a new sub-paragraph immediately after G.S. 90-233(c) (4) to be numbered G.S. 90-233(c) (5) and to read as follows:

S90-233(c) (5). Any act or acts performed within this State by a dental assistant, or any other person, under the supervision of a dentist licensed to practice in this State which is or are undertaken pursuant to a specific dental research project of the School of Dentistry of the University of North Carolina or of any other governmental body or agency of the State of North Carolina or its political subdivisions and which specific research project has been approved by the Board. The Board shall approve all such specific dental research projects submitted in writing to it within days (number of days to be specified) thereafter which the Board finds meets the following criteria:

(a) The body or agency sponsoring and supervising the dental research project has available and agrees to utilize adequate financial resources and professional expertise for the accomplishment of the project; and

(b) The body or agency sponsoring and supervising the dental research project agrees to make its findings and conclusions from such research freely available to the public; and

(c) The research protocol and procedures are scientifically satisfactory; and

(d) The health and safety of all persons who participate in the project will reasonably be protected; and

(e) The research procedures on human subjects shall be performed only on persons freely consenting thereto after being informed by a dentist licensed in this State as to the procedure involved, and the training of the individual directly performing the same.

The Board may revoke any approval of a specific dental research project theretofore given by it after hearing afforded to the sponsoring and supervising body or agency upon a finding by the Board supported by competent evidence that the project no longer complies with the criteria hereinabove set forth. Upon disapproval of a specific dental research project or upon revocation of an approval theretofore given, the Board shall promptly inform the submitting body or agency of its action together with specific and detailed reasons for such disapproval or revocation of a prior approval.

Section 2. This Act shall become effective upon ratification.

A BILL TO BE ENTITLED

AN ACT AMENDING SECTION 90-29 OF THE GENERAL STATUTES WITH REGARD TO THE PRACTICE OF DENTISTRY.

The General Assembly of North Carolina enacts:

Section 1. Section 90-29(c) of the General Statutes is hereby amended by adding a new sub-paragraph immediately after G.S. 90-29(c) (11) to be numbered G.S. 90-29(c) (12) and to read as follows:

S90-29(c) (12). Any act or acts performed within this State by a dental hygienist, a dental assistant, or any other person, under the supervision of a dentist licensed to practice in this State which is or are undertaken pursuant to a specific dental research project of the School of Dentistry of the University of North Carolina or of any other governmental body or agency of the State of North Carolina or its political subdivisions and which specific research project has been approved by the Board. The Board shall approve all such specific dental research projects submitted in writing to it within days thereafter which the Board finds meets the following criteria:

(a) The body or agency sponsoring and supervising the dental research project has available and agrees to utilize adequate financial resources and professional expertise for the accomplishment of the project; and

(b) The body or agency sponsoring and supervising the dental research project agrees to make its findings and conclusions from such research freely available to the public; and

(c) The research protocol and procedures are scientifically satisfactory; and

(d) The health and safety of all persons who participate in the project will reasonably be protected; and

(e) The research procedures on human subjects shall be performed only on persons freely consenting thereto after being informed by a dentist licensed in this State as to the procedure involved, and the training of the individual directly performing the same.

The Board may revoke any approval of a specific dental research project theretofore given by it after hearing afforded to the sponsoring and supervising body or agency upon a finding by the Board supported by competent evidence that the project no longer complies with the criteria hereinabove set forth. Upon disapproval of a specific dental research project or upon revocation of an approval theretofore given, the Board shall promptly inform the submitting body or agency of its action together with specific and detailed reasons for such disapproval or revocation of a prior approval.

Section 2. This Act shall become effective upon ratification.

RALEIGH, NORTH CAROLINA

March 29, 1974

Call to Order. The Executive Committee convened on Friday, March 29, 1974, at the Velvet Cloak Inn in Raleigh, North Carolina. Dr. William A. Current, Chairman, called the meeting to order at 3:35 p.m. and Dr. R. B. Barden led in prayer.

Roll Call. Officers present: James A. Harrell, president; Charles W. Horton, president-elect; Gerald M. Cathey, vice president; J. Harry Spillman, secretary-treasurer; Robert J. Shankle, editor-publisher.

Executive Committee members present: William A. Current, Chairman; Joseph M. Johnson, R. B. Barden, Frederick G. Hasty.

Staff member present: Robert L. Cherry, Executive Secretary.

Others present: Ralph D. Coffey, Speaker-of-the-House.

Approval of Minutes. The minutes of January 5 and 6, 1974, were approved on motion by Dr. Barden, seconded by Dr. Hasty.

ADA Regional Conference. On a motion by Dr. Hasty, seconded by Dr. Barden, it was approved that Dr. Horton select one of the five district presidents to make a presentation at the ADA Regional Conference in Charleston in July and that the Society pay his expenses if they are not paid by another source.

Minimal Dental Health Standards for State Institutions. Dr. Horton informed the Executive Committee that he would be changing the name of the Subcommittee on Minimal Dental Health Standards for State Institutions to Dental Health for Institutionalized People.

Dental Practice Act. Dr. Johnson moved that the Executive Committee endorse in principle the resolutions to be presented by Dr. Harrell, President of the Society, at the first session of the House of Delegates. Dr. Horton seconded the motion and it carried.

Dr. Johnson moved that the Executive Committee approve the proposed changes to the Dental Practice Act to be presented to the House of Delegates and if passed by the House of Delegates all expedient methods possible be used to obtain passage of the changes in the N. C. State Legislature. Dr. Barden seconded the motion and it passed.

PSRO. On a motion by Dr. Spillman, seconded by Dr. Horton, Dr. Ernest W. Small was approved as the Society representative to the State Peer Standard Review Organization.

ADA Management Conference. On a motion by Dr. Spillman, seconded by Dr. Horton, the Executive Secretary and the Secretary-Treasurer of the Society were authorized to attend the ADA Management Conference in Chicago in June.

Spouse Resolution. Dr. Harrell moved that a resolution be presented to the House of Delegates through the Constitution and Bylaws Committee to change the Constitution and Bylaws of the Society to request that spouses accompany Society members to all Society meetings where social functions are a part of the program. Dr. Spillman seconded the motion and it carried.

Adjournment. The meeting adjourned at 5:40 p.m.

RALEIGH, NORTH CAROLINA

March 30, 1974

Call to Order. The Executive Committee convened on Saturday, March 30, 1974, at the Velvet Cloak Inn in Raleigh, North Carolina. Dr. William A. Current, Chairman, called the meeting to order at 11:40 p.m.

Roll Call. Officers present: James A. Harrell, president; Charles W. Horton, president-elect; Gerald M. Cathey, vice president; J. Harry Spillman, secretary-treasurer; R. J. Shankle, editor-publisher.

Executive Committee members present: William A. Current, Chairman; Joseph M. Johnson, R. B. Barden, Frederick G. Hasty.

Staff member present: Robert L. Cherry, Executive Secretary.

Dental Students in House of Delegates. Dr. Barden moved that the dental student representatives to the House of Delegates be thanked by letter for their participation in the House of Delegates. The student representatives are also to be informed that the Executive Committee regrets that it cannot endorse a vote for the students in the House of Delegates since this would be contrary to the policy established by the ADA. Dr. Horton seconded the motion and it was passed.

Selection of Dean. Discussion was held concerning the selection of the new Dean of the University of North Carolina School of Dentistry.

On a motion by Dr. Johnson, seconded by Dr. Harrell, it was approved that the Executive Committee take no official action on the selections under consideration for the new Dean of the Dental School but individual members who feel strongly about the matter be encouraged to write the Chancellor of the University of North Carolina at Chapel Hill. Dr. Cathey abstained from voting.

Next Meeting. The next meeting of the Executive Committee was set for noon, Wednesday, May 15 at Pinehurst.

Adjournment. The meeting adjourned at 12:55 a.m., March 31.

21st Annual District Officers Conference

North Carolina Dental Society

Velvet Cloak Inn

Raleigh, North Carolina

December 8, 1973

Call to Order: The 21st Annual District Officers Conference was called to order at 9:15 a.m. on Saturday, December 8, 1973 at the Velvet Cloak Inn, Raleigh, North Carolina by Dr. Joseph M. Johnson, President of the Conference.

Invocation: Dr. Frederick G. Hasty, Vice President of the Conference, led in prayer.

Society Report: Dr. James A. Harrell, President of the North Carolina Dental Society, gave a report on the North Carolina Dental Society. Dr. Harrell's report included Preventive Dentistry, the Continuing Education Council of N. C., the program for the May, 1974 Annual Session at Pinehurst, his disagreement with moving the House of Delegates back to the Annual Session, a change to the *Constitution and Bylaws* to have the President-Elect succeed the President rather than the Vice President, state dental society election customs, registration of laboratories, the Dental Forum and certain issues he wished discussed in the district officer's training sessions.

Industrial Commission: Dr. D. W. Seifert, Chairman, Subcommittee on the Industrial Commission, gave a status report on the relations with the Industrial Commission.

Group Discussion: The Conference recessed at 10:15 for individual district officer training sessions and reconvened at 1:40 p.m.

Peer Review: Dr. James H. Lee, Chairman of the N. C. Dental Society State Peer Review Committee, gave a report of a morning meeting with the specialty groups concerning peer review.

Training Sessions Discussion: Dr. James A. Harrell, moderator of the training session for Presidents, reported that the district presidents voted to accept the DOC Manual as is. Dr. Harrell also reported that new member attendance at district meetings was discussed.

Several members of the Conference retired at this time to complete a resolution on new members.

Dr. Charles W. Horton, moderator of the Presidents-Elect, reported the tentative dates for the 1975 annual meetings of the districts as follows:

1st District—September 26, 27, 28—Asheville or Blowing Rock

2nd District — September 20, 21, 22—Downtowner, Charlotte

3rd District—October 4, 5, 6—Four Seasons, Greensboro

4th District—October 10, 11—Royal Villa, Raleigh

5th District—September 11, 12, 13—Wilmington

Dr. Joseph M. Johnson, moderator of the training session for state committee chairmen, reported the following recommendations from their session:

- (1) The state committees should be appointed and notified prior to the Annual Session in Pinehurst.
- (2) The chairmen of each committee should be asked to meet with his committee at Pinehurst.
- (3) The President-Elect should direct the committees as to their goals at the time of their appointment.
- (4) The chairman be responsible for seeing that all committee members are active in their duties.
- (5) The district delegation to the NCDS House of Delegates have a called caucus one week prior to the meeting of the House of Delegates and invite members from their district that serve on committees that have reports in the Blue Book.
- (6) One issue of the *Newsletter* be given to the President-Elect to announce his committee appointments and in which his specific instructions to the committees be outlined.

Dr. R. J. Shankle, moderator of the training session for District Editors, reported the following recommendation:

- (1) District Editors appointments become effective January 1 of each year.

Dr. Ralph D. Coffey, moderator of the training session for delegates, stated the following recommendations:

- (1) The names of the reference committees in the NCDS House of Delegates are to be changed.
- (2) Important issues of the Dental Society should be published in the *Newsletter* prior to the NCDS House of Delegates Meeting.
- (3) The Blue Book should be mailed 30 days prior to the NCDS House of Delegates Meeting.
- (4) The Central Office should mail to the District Presidents prior to the Annual District Meeting issues facing the next NCDS House of Delegates.

(5) Delegates should attend the meetings of the Dental Forum.

Dr. Kenneth D. Owen, Secretary-Treasurer of the Second District, submitted the following resolution which was duly seconded and passed:

Resolved, that every member of the N. C. Dental Society in order to maintain his membership be required to attend separate orientation and charge sessions at the next annual meeting of his district dental society following his election to membership (service time excluded) and be it further

Resolved, that failure to comply with the above requirement result in a review of membership status of said new member by the Executive Committee of said new member's district dental society and be it further

Resolved, that in order to implement the above requirement the following be done immediately—that a statement be placed on all future applications for membership in the N. C. Dental Society to read as follows: I understand that should I be elected to membership in my local district dental society and the N. C. Dental Society, my continuing membership is subject to my attendance at separate orientation and charge sessions at the next annual session of my district dental society and be it further

Resolved, that the Executive Committee of the N. C. Dental Society in conjunction with the N. C. Dental Society standing committees on Membership and Constitution and Bylaws immediately seek means to enforce the above requirements on membership and present its proposal to the next meeting of the N. C. Dental Society House of Delegates.

On a motion by Dr. Milton V. Massey, seconded by Dr. Kenneth D. Owen, the Conference passed a resolution that at future annual district meetings the N. C. Dental Society is to pay for tickets for the N. C. Dental Society President, President-Elect, Vice-President, Secretary-Treasurer, Editor and Chairman of the Executive Committee.

On a motion by Dr. James A. Privette, seconded by Dr. Roy L. Lindahl, the Conference approved inviting the President of the N. C. Dental Auxiliary as a non-paying guest.

On a motion by Dr. Joe B. Roberson, seconded by Dr. Harold Maxwell and approved by the Conference, any other non-paying guests to annual district meetings is to be left to the discretion of the districts.

Dr. Gerald M. Cathey, moderator of the training session for Vice Presidents, reported on plans for getting non-members into the N. C. Dental Society.

Election: By unanimous vote Dr. James A. Harrell was elected President of the 1974 District Officers Conference. Dr. William A. Current was elected Vice President of the Conference and Robert L. Cherry was elected as Secretary.

Registration: Registration for the 21st Annual District Officers Conference totaled 55, including:

District Officers, Executive Committee Members, Delegates and Alternates, and State Committee Chairmen	40
State Officers and Executive Committee Members	9
ADA Delegates	4
Dental Health Section Staff	1
Special Guests	1
Total	55

Adjournment: The Conference was adjourned at 4:15 p.m.

CARIBBEAN FLY-CRUISE
February 22-March 1, 1975

RHINE RIVER CRUISE
June 29-July 5, 1975

Committee Reports

ANNUAL SESSION COMMITTEE

DARDEN J. EURE, JR., *General Chairman*

KEITH L. BENTLEY	WILLIAM L. HAND, JR.
BAXTER B. SAPP, JR.	CARLE W. MASON, JR.
ELDON H. PARKS	LEONARD R. CASHION
CHARLES M. KISTLER	L. P. MEGGINSON, JR.
ROBERT H. GAINESY	CECIL R. LUPTON
WILLIAM R. HARTNESS, III	

Meetings. The Annual Session Committee met January 5, 1974, for the purpose of budgeting the 1974 annual meeting. The General Chairman met in joint session with the Executive Committee to submit the proposed budget. This meeting was held at the Pinehurst Hotel.

Budget. A total budget of \$13,836.00 was approved by the Executive Committee on January 5, 1974.

Arrangements. Many of the responsibilities of the Arrangements Committee have been completed by the office of the Executive Secretary, including: mailing of hotel reservation forms to the members; assigning of meeting rooms in the headquarters hotel; procuring of visual aids and other equipment required by the clinicians; employment of a stenotypist; arrangements with the hotel for projectionists and technicians for monitoring amplifying equipment for general and scientific sessions; securing of signs for the registration area, the lobby and meeting rooms; printing of hand programs and preparation of the President's emblem and certificate. An appropriation of \$3,900 has been approved.

Program. Five clinicians have been secured. They are Dr. Ernie Small and staff from the University of North Carolina; Drs. Irving L. Yaliove and Joseph B. Deitz, Jr. of Wilmington, Delaware; Dr. Jacob Freedland of Charlotte, North Carolina; and Dr. Thomas E. Braly of Chattanooga, Tennessee. An appropriation of \$2,832 has been approved.

Table Clinics. Table Clinics from each district will be presented. One will be selected to represent the North Carolina Dental Society at the next annual American Dental Association Meeting. An appropriation of \$100 has been approved.

Commercial Exhibits. The floor plan calls for 85 booths. Most of the booths were sold by January, 1974. The sale of all booths will realize a total revenue of \$17,015. The Society will host a cocktail party for the exhibitors Monday, May 13. An appropriation of \$2,313 has been approved.

Entertainment — Dance — Banquet. Activities have been planned to include:

- (1) Sunday, May 12—Poolside cocktail party honoring the North Carolina Dental Auxiliary
- (2) Tuesday, May 14—
 - (a) Reception honoring new members
 - (b) Banquet
 - (c) Entertainment and dance featuring the New Century Platters

An appropriation of \$3,400 has been approved.

Monitor. Monitors have been assigned to all scientific and general sessions. All monitors have been notified of their assignments. No appropriation was requested.

Auxiliary. The North Carolina Dental Society will honor the North Carolina Dental Auxiliary at a poolside cocktail party. No appropriation was requested.

Publicity. Mrs. Bernadette Hoyle has been employed to prepare pre-convention releases and releases via the wire services

during the Annual Session. An appropriation of \$496 has been approved.

Scientific Exhibits. Scientific exhibits will be on display as space allows during the Annual Session. No appropriation was requested.

Sports. The Annual Golf Tournament has been scheduled for Sunday, May 12. Entrance fees are expected to make the tournament self-sustaining and no appropriation was requested.

House of Delegates. An appropriation of \$570 was approved to cover the expenses of the House of Delegates. The House of Delegates will convene March 29 at the Velvet Cloak Inn, Raleigh. This appropriation will cover preparation, publication and mailing of the Blue Book, the services of a stenotypist and other miscellaneous items incidental to the meeting.

Resolutions

This report is informational in nature and no resolutions are submitted.

CONSTITUTION AND BYLAWS COMMITTEE

WILLIAM G. SCHNEIDER, *Chairman*
(1977)

C. P. GODWIN (1976)	G. SHUFORD ABERNETHY (1978)
THOMAS G. NISBET (1975)	CHARLES A. REAP, JR. (1974)

Meetings. The Committee met through telephone and personal conversations.

Assignments. One resolution (18-1973-H) was referred to the Committee by the 1973 House of Delegates. In addition, a resolution adopted by the 21st District Officers Conference, December 8, 1973, was jointly referred to this Committee, the Executive Committee and Membership Committee of the North Carolina Dental Society.

Executive Structure. The 1973 House of Delegates referred the following resolution to the Constitution and Bylaws Committee:

18-1973-H Resolved, that Section 6 of Article 1 of the Bylaws be deleted and the following substituted therefor:

Section 6. In the event the office of President becomes vacant, the President-Elect shall become President for the unexpired portion of the term, after which he shall serve a full term as President. In the event both the offices of President and President-Elect becomes vacant, the Vice President shall become President for the unexpired portion of the term. In the event the office of President-Elect becomes vacant, the President for the ensuing year shall be elected at the next annual session of the Society in accordance with Chapter IV of the Bylaws. A vacancy in the office of Vice President or in the office of Secretary-Treasurer shall be filled for the unexpired portion of the term by a majority vote of the Executive Committee.

The purpose of the initial request (October 8, 1972, Executive Committee) for this Committee to study the executive structure of the Society was basically for two reasons as this Committee interpreted the request. These reasons were (1) to provide a better continuity for the business affairs of the Society in the event the office of President became vacant and (2) to make the office of Vice President more meaningful.

After diligent and careful review again this Committee feels the proposed structure of 10-1973-H seems to provide for a more logical continuity; however, objective number two, that of making the office of Vice President more meaningful, seems to be in direct conflict, since in essence, it does away with the defined major duty of the Vice President.

Historically, the office of Vice President has been discussed from just about every vantage point and it seems that the effectiveness of this office relative to providing continuity and making it more meaningful cannot be legislated but must be the direct responsibility of the President.

An appropriate resolution appears at the end of this report.

Membership. The twenty-first District Officers Conference adopted the following resolution on December 8, 1973:

Resolved, that every member of the North Carolina Dental Society in order to maintain his membership be required to attend separate orientation and charge sessions at the next annual meeting of his district dental society following his election to membership (service time excluded) and be it further

Resolved, that failure to comply with the above requirement result in a review of membership status of said new member by the Executive Committee of said new member's district dental society and be it further

Resolved, that in order to implement the above requirement the following be done immediately—that a statement be placed on all future applications for membership in the North Carolina Dental Society to read as follows: I understand that should I be elected to membership in my local district dental society and the North Carolina Dental Society, my continuing membership is subject to my attendance at separate orientation and charge sessions at the next annual session of my district dental society and be it further

Resolved, that the Executive Committee of the North Carolina Dental Society in conjunction with the North Carolina Dental Society Standing Committees on Membership and Constitution and Bylaws immediately seek means to enforce the above requirements on membership and present its proposal to the next meeting of the North Carolina Dental Society House of Delegates.

The Constitution and Bylaws Committee believes this resolution has merit. However, at the writing of this report we have not received the recommendations of the Executive Committee or the Membership Committee. In the interest of placing the above resolution before the 1974 House of Delegates as instructed, a resolution appears at the end of this report with the understanding that it represents only the thinking of this Committee. The intent is that it receive the input of the other designated committees during the reference committee sessions.

Resolutions

4. Resolved, that resolution 18-1973-H be postponed indefinitely.

5. Resolved, that Article IV of the Bylaws, present Section 2 be renumbered section 3 and present Section 3 be renumbered Section 4, with the following becoming a new Section 2:

Section 2. Every new member of the North Carolina Dental Society, in order to maintain his membership, is required to attend separate orientation and charge sessions at the next annual meeting of his district dental society following his election to membership (service time excluded), and that failure to comply with this requirement will result in a review of his membership status by the Executive Committee. The prospective new member will be notified of this requirement by placing the following statement on all future applications: I understand that should I be elected to membership in my local district dental society and the North Carolina Dental Society, my continuing membership is subject to my attendance at separate orientation and charge sessions at the next annual session of my district dental society.

DENTAL CARE PROGRAMS COMMITTEE

WALTER S. LINVILLE, Jr., *Chairman*

JOSEPH E. CAMPBELL

WILLIAM E. KIDD

JAMES H. LEE

D. W. SEIFERT, JR.

GEORGE G. DUDNEY

RICHARD H. GRAHAM

CHARLES W. HORTON

WILLIAM G. WARE

Meetings. The Committee held only one formal meeting. On May 5th the Chairman and Charles Horton met with representatives of the Department of Social Services in Raleigh. Department officials present were Mr. Emmett Sellers, Mrs. Lillian Gaskills and Bob Watkins. Other business has been conducted by the Chairman by means of several trips to Raleigh and numerous telephone conversations.

Assignments. The Committee assignment was to expand and strengthen the Title XIX dental programs. The North Carolina Dental Society made the following requests:

1. That the dental provisions of HEW Regulations of Health Screening Diagnosis and Treatment of individuals up to age 21, be fully implemented as of July 1, 1973.

2. That the dental programs under Title XIX be reinstated to its original status prior to August 1, 1971 subject to the following modifications:

a. Provision of removable prosthesis when masticatory function is endangered, or when existing prosthesis is unserviceable, or in instances when esthetic considerations interfere with employment or social development.

b. That the dentist must certify that all teeth and supporting structures have been properly prepared to receive a removable prosthesis prior to insertion of same.

c. That no new full or partial dentures be provided for a patient for a period of three years after the original prosthesis is inserted except by prior approval for unusual conditions or circumstances.

d. That a co-payment of \$2 per visit be required.

e. Also a return to payment of 100 per cent usual, customary and reasonable fees since we are required to collect copayments.

Results. With the exception of return to 100 per cent payment, the Committee feels that the other recommendations have been met. The program was reinstated with controls to protect the dentist and patient.

The Department of Social Services has hired a dentist. This has greatly facilitated the processing of prior approval forms. New more complete forms will be instituted when the present supply is exhausted. A complete dental manual for Title XIX is about to go to press.

A good many complaints have been handled during the year. Most of these are due to the dentists not following printed regulations or dentists wanting a fee schedule.

Work to Be Accomplished. The payment of fees should be returned to 100 per cent of the 75th percentile. This can only be done by the Legislature. It will take a concentrated effort by each individual member of the Society. The dentist must contact his State Legislator and convey to him the unfairness of the present situation.

Resolutions

This report is informational in nature and no resolutions are submitted.

DENTAL CARE PROGRAMS COMMITTEE

Subcommittee on State Agencies

WILLIAM E. KIDD, *Chairman* (1973)

Hardy F. COFIELD

JAMES L. COX

(1973)

JAMES PRIVETTE

(1973)

SAMUEL N. TRUEBLOOD

Meetings. The State Agencies Subcommittee met September 14, 1973 in Wilmington, North Carolina. The Chairman, William E. Kidd and the other members of the Committee were requested to submit any and all business. After reviewing only two small complaints of the membership which were resolved, the Committee voted to meet in Raleigh December 8, 1973.

The State Agencies Subcommittee met December 8, 1973 in Raleigh. The meeting was called to order by William E. Kidd, Chairman and because there was no business to discuss or new course of action to take or additional instructions issued by Dr. Jim Harrell, President of the North Carolina Dental Society, the Committee voted to adjourn and to call a special meeting when the need arises.

Resolutions

This report is informational in nature and no resolutions are submitted.

DENTAL CARE PROGRAMS COMMITTEE

Subcommittee on Industrial Commission

DAVID W. SEIFERT, *Chairman*

JOHN F. POVLICH, III
CLARENCE SHOFFNER

FRANK H. WALKER
ROBERT W. SUGG
CLEVELAND W. FLOYD

Meetings. The Committee held a meeting in the offices of the North Carolina Dental Society on September 27, 1973. In addition to the members of the Committee, we invited Mr. Bill Stevenson, Commissioner to the Industrial Commission to be with us and Mr. Robert Cherry. We also invited Dr. Don Coffey, Dr. Ben Brown and Dr. John Sowter.

The purpose of inviting the special groups was in order to get a fee schedule from them as far as their specialty groups are concerned. It was thought by some members of the Committee that some of the specialists had been penalized by the fee schedule we had.

Discussion. The purpose of the meeting was to discuss the fee schedule we had and to update it if possible. We also had noticed that there were some problems throughout the state concerning the law as applied to the Industrial Commission. So we discussed that and as a result of these discussions, several conclusions were arrived at by the committee. We did update the fee schedule in many instances. This will not be reported because Mr. Stevenson noted that as soon as we print it, that it becomes everybody's fee. So it will not be printed but we do ask the people to go ahead and charge their usual and customary fee and we will make the adjustments, if necessary.

After the discussion of the problems we are having concerning the law and the Industrial Commission, Mr. Stevenson has requested that he be allowed to talk to the various districts and I appeared at the District Officers Conference and requested the presidents of the various districts to allow Mr. Stevenson to do this and I think we will get cooperation from them. Mr. Stevenson has also requested a table to be set up at the Carolina Hotel during our meeting in May. I have talked to Mr. Cherry about this and Mr. Cherry says that it can be arranged. Mr. Cherry has also given me permission to get together a projected clinic which will be given either as a table clinic or as a projected clinic in order to further the understanding of rules and regulations pertaining to the Industrial Commission.

We discussed the fact that the Peer Review Committee was now organized and a going thing. I have discussed some of the problems we have with the Peer Review Committee and we have found that they can help us. We do not anticipate that we will have to turn anybody over to the Peer Review Committee. We do know that it could happen.

DENTAL SEMINAR DAY Dec. 6, 1974

Results. As a result of our meeting one thing stands out in mind and that is the fact that we have many laws governing the practice of dentistry in North Carolina that are not administered by the State Board. These laws govern the conduct of dentists in relationship with state agencies, federal agencies and perhaps insurance companies. It is also a fact that no one has ever made a comprehensive study of all of the laws pertaining to this. It is our sincere belief that some committee or perhaps an existing committee should make a study of the laws pertaining to our various associations with the different agencies. These should be codified and presented to us in the form of a booklet so every man could be familiar with them. We find that when someone is practicing outside the law it is always due to ignorance. If we could get the message across this would stop. An appropriate resolution appears at the end of this report.

Resolutions

9. Resolved, that a committee be appointed or a present committee be given the responsibility of reviewing the various laws that govern our relationship with various state and federal agencies and codifying them and publishing them for the various members of our Society.

DENTAL CARE PROGRAMS COMMITTEE Subcommittee on Peer Review

JAMES H. LEE, *Chairman*

C. M. KISTLER
L. W. LEE

W. H. PRICE
K. M. RAY

M. B. RICHARDSON

Meetings. Members of State, District and Specialty Peer Review Committees met at the Central Office 8 December 1973.

Action. North Carolina Dental Society Peer Review Manual changed to read on page 7, section 4, line 8, "... or in case of a specialty, the State Review Committees designated Specialty Subcommittee." This was approved by the North Carolina Dental Society Executive Committee 8 December 1973.

A Guide for the Evaluation of Dental Care was distributed to Peer Review Committee members.

Resolutions

This report is informational in nature and no resolutions are presented.

DENTAL EDUCATION COMMITTEE

R. B. BARDEN, *Chairman*

KENNETH RAY
C. DEAN COUCH, JR.
GUY R. WILLIS
SHUFORD ABERNETHIEY
TOM G. COLLINS

RILEY SPOON, JR.
RAY CARNEVALE
J. HARRY SPILLMAN
WILLIAM H. OLIVER
JAMES M. ZEALY

Meetings. During the winter of 1973-74, this committee met with each school in the state that has a dental education program. A report on each school follows; however, due to the detailed and lengthy report submitted for the past two years, this report attempts to show current status and the changes that have occurred within the past year. For more details in regards to each school, your attention is invited to the 1973 report to the House of Delegates.

University of North Carolina School of Dentistry

Doctor of Dental Surgery Program: The revised curriculum has been in effect now for four and a half years with one class graduated in 1973 having been under the revised curriculum for the entire four years of training. The major changes in the overall program centers around the concept of total patient care, emphasis on treatment planning, preventive dentistry, preceptorship supervision and concentration on dentally related sciences

as opposed to an excess of unrelated laboratory procedures and didactic material from the former curriculum.

From some of the time that has been saved more clinical experiences have been made available for the students both at school as well as at extramural sites such as Murdoch Hospital, Veterans Hospital, some local hospitals and various county health departments. Attendance is required at these programs, even though credit towards their clinical requirements is not given. Through efforts to reduce duplication in pre-clinical experiences, the total time in clinic has been expanded. Clinical competence evaluation is recognized by the faculty as one of their most difficult problems.

Under the preceptorship concept, each student must perform a diagnosis and treatment plan on each patient assigned to him to be submitted to a preceptor who is a member of the faculty. This treatment plan is approved or modified and the student carries this through on the total patient care basis for the four years in dental school under the supervision of a member of the clinical faculty. This extra load on the faculty has proven to be quite burdensome, and it is under present scrutiny for some modification of the plan. The faculty feels that under the total patient care concept there must need be some follow up and supervision of the system by a type of preceptorship. One faculty member at one time had over 200 cases to observe. In spite of this burden it has proven to be a broadening experience for faculty members who are mostly specialists. Some 70 members of the clinical faculty are involved in the preceptorship program.

Under the flexibility of the revised curriculum there exists the possibility of students completing their requirement before the end of the fourth year. Also the opposite situation exists in that there might just as well be students that might be held over for further instructional opportunity. This was true in the case of six students retained for further instruction in 1972. All of these students are fully informed in regards to their status as to whether they may be finishing early or also the fact that they may be behind in their performance.

The faculty members were divided in their opinion as to the numerical requirements concept. Even though all agree with the concept that ideally it would be best for the student to accomplish his work thinking of total patient care as opposed to thinking of the patient as so many requirement points, some feel that points are necessary while others disagree. This appears to be a conflict within the faculty and the problem one of considerable magnitude demanding much effort to resolve. The varying opinions of the faculty seem to indicate that inevitably the final method will be a modification or compromise of both extremes.

As expected, many problems were encountered as a result of changes in the methodology of teaching and handling of patients. Many of the solutions have already been effected and as a result the revised curriculum is now felt to be an improvement over the old one. Effectiveness of the revised curriculum is difficult to evaluate completely at this stage in time. It has been stated that it might take eight to ten years to accurately evaluate the effectiveness of the program. To date the National Board results show a very good result and some of the board results from the Northeast Regional Examination are very good.

During this period of curriculum revision much growth has occurred. The student body has increased from enrollment of 50 to the present enrollment of 83 per freshman class. The faculty members have ranged from a total of 39 to presently approximately 123.

The Council on Dental Education performed a site visit of the D.D.S. program in 1972 and the program is fully accredited.

Dental Hygiene Program: This is the third year that the dental hygiene program has started with 60 per freshman class. The present enrollment is 57 in the second year class and 49 in the first year class, plus 14 post-certificate students, a total of 120 presently enrolled. The hygiene program continues to enjoy a surplus of applicants, approximately 3 to 1 ratio, and the

quality is satisfactory. The present first year class has shown the highest rating to date. The department however, now feels that 50 per class is the optimal number and will in the future reduce to 50 students per year.

During the past year, the dental hygiene faculty has continued to implement and/or refine the modifications and revisions that were planned during the 1972-73 general curricular review.

An experimental program in the basic sciences was initiated to coordinate these subject areas better, the ultimate goal being the development of integrated courses in Human and Oral Biology. Major emphasis in this approach has been relevant to clinical activities.

In general clinical activities, every effort has been made to provide maximum experiences to support the team concept of the delivery of dental health care. Dental, dental hygiene and dental assisting students are working together more than in the past, and each member of the team should be better prepared for of-fice practice because of this type of experience.

In dental hygiene clinical activities, major emphasis has been on the refinement of the basic clinic program. Teaching and evaluation methods have been and are being reviewed. External clinical evaluators have been brought in to assist in this effort. The clinical preceptor program, which assigns groups of 10 students to 1 faculty member for individualized instruction, problem-solving, and counseling, has been invaluable in strengthening the overall clinical program. The lack of suitable patients has been and is the greatest deterrent. Without an adequate supply of patients who present with varying degrees of case difficulty, particularly advanced periodontal disease, students cannot refine basic skills. All departmental areas have been assisting in the search for suitable patients, but the problem still exists. The reduction in student enrollment should provide some relief. Conceivably, this is an area in which private practicing dentists in the state could be of direct help to the program.

In the area of community dentistry, opportunities for student field experiences are good and some valuable faculty supervised clinical experiences are occurring in these programs. A recently approved extramural program at the Veterans Hospital in Fayetteville will enhance instruction in community dental health and will provide some supplemental clinical experience.

In the area of expanded functions, students are taught at the laboratory level most of the procedures now considered appropriate for delegation to the dental hygienist. Clinical experience in these areas has not been structured. From an educational standpoint, this deficiency is a problem that must be solved.

The caliber of instructors in all aspects of the curriculum is very good. In-Service Training Programs for dental hygiene clinical faculty are held semi-annually to assure quality-control. Clinical demonstrations and classroom presentations are an integral part of the selection process for new faculty.

Dental Assistant Program: This program is a 10 consecutive month program starting in June with the students being assigned to D.D.S. students at the beginning of the fall semester. These students remain with the D.D.S. students through the remainder of their training program for various experiences in various fields. They obtain a total of 600 clinical hours. There are 40 dental assistant students in each class and the number and quality of the applicants appears to be adequate. Plans are now in progress to increase each class to 60.

Each student takes five full mouth x-rays during the course of training, and each student gets to spend one week in the preventive dentistry department program. All students rotate through various disciplines with the student dentist to which they are assigned with emphasis on surgery and chair-side procedures.

Chapel Hill also offers a correspondence course for dental assistant training. It is the only such course offered in the country and continues to have an enrollment of some several hundred in process. This program now is modified by a challenge examination mechanism which may reduce the portions of the course required depending upon the results of this examination.

Dental Auxiliary Teacher Education ("Date"): The Date program is six years old with approximately 20 participating in each class. This class is open for certified dental assistants, dental hygienists, and certified (or eligible) dental laboratory technicians. This course is for the purpose of providing trained teachers in the various disciplines. A degree in Bachelor of Science in DATE is granted on completion of the course. The length of time necessary to complete degree requirements varies with individuals because of their past experience and training and usually ranges between 18 and 24 months.

A unique feature of the degree requirements is the teaching internship. For this assignment a student usually spends ten to fifteen weeks, dependent on credit allowance, as an instructor, under supervision, in one of the six colleges approved for this special experience. Five of these cooperating institutions are located in-state and one is located out-of-state. The faculty for this course is composed of teachers and the dental school and other parts of the University.

Since inception of the program in 1971, there have been 25 graduates. Most of them are in teaching programs across the United States. The first dental laboratory technician graduated in June 1973 and is now teaching at Durham Technical Laboratory Institute. Three graduates are in executive positions in a state health department, American Dental Association Council on Dental Education, and an Auxiliary program.

The present objective of this program is to increase the number of students, improve methods of selection of candidates, and secure additional financial funding for students in the form of scholarships, loans, grants, and trainee-ships. Cost for this course is approximately \$2,000.00 to North Carolina residents and \$4,000.00 for out-of-staters.

Research Program. The dental research institute at Chapel Hill is one of five in our country. It is considered to rank in the top two of these. It operates on an overall budget of 1.5 million dollars per year. The bulk of the funds comes from the National Institute of Dental Research (NIDR). Other funds are generated from various foundations and grants allotted to individual researchers.

The overall program of this institute at the dental research center is growth and development including projects in immunology, growth, speech, mineralizations, biomaterial, and neural investigations. A pain control clinic which is a service clinic for problem patients is also centered here and is the only one in the Southeast related to clinical and applied research.

The research center is utilized by not only dentists, but physicians, veterinarians, visiting researchers, and others who might obtain a grant for specific research work related to dentistry. Twenty-two students made use of the center for in-depth laboratory studies last year and 19 dental graduate students are also using the center.

The budget and procurement of funds are handled by a team effort within the dental school administration. All programs are well regulated by peer review and administrative supervision.

Graduate Program: The overall purpose of this program is to supply clinical specialists for the dental profession and material for faculty. Graduate training is offered in oral surgery, endodontics, pedodontics, orthodontics, periodontics and prosthodontics. Current enrollment totals 43.

The graduate students participate in the preceptorship program and other phases of the D.D.S. curriculum. A very important "spin-off" in the graduate program is the specialty service for certain patients that the school could not otherwise offer. The applicant-selectee ratio is about 5 to 1, with the exception of prosthodontics, and approximately 50 per cent of current students are North Carolina residents. Financial aid to students, necessary in the competition for selecting the best students, is available in the form of direct loans (Federal programs), graduate teaching assistantships, Institutional training grants, Morehead fellowships, Dental Foundation and private funds. The school is receptive to opinions from private prac-

titioners as to the need for enrollment in the specialist programs.

The program recognizes the advantage of faculty members doing graduate work in a school different from which their D.D.S. training was taken to prevent "inbreeding." The number of fulltime graduate faculty members has quadrupled from 1966 to present.

Continuing Education: The Continuing Education Program is much more active now that the curriculum revision has been accomplished, releasing time and accommodation for this activity. Some 30 courses are currently planned with additional offerings being made available at odd times. The School participates in five Area Health Education Center Programs across the State. The program is under the direction of the School of Dentistry's Continuing Education Committee, which has a participant from each department in the Dental School and a Continuing Education Council which is a broader committee to represent all of the programs across the State. The program cooperates with the Academy of General Dentistry and has set up guidelines for study clubs to have their activities approved for the Academy Programs. A report from the Central Office for Continuing Education and Health Services shows some 20 per cent of the practitioners in North Carolina participating in these courses. Records are being kept also for information as to who participated when.

Budget and Future Plans: The Dental School is presently operating on a budget of approximately 7 million dollars—40 per cent of which comes from the State, approximately 24 per cent from Federal allocations including the Research Institute Grant and Capitation Grants, and the remaining 36 per cent from tuition, contracts, and the intra-mural service.

The major plans for the Dental School at present consist of renovation of the first floor of the old building, consisting of oral diagnosis and oral surgery departments; completion of renovation of the second floor of the old building, mainly the endodontic department; renovation of the third floor of the old building, orthodontic department; and construction of a small office building to be located between the old dental building and the research building. Total cost of projected renovation and buildings amounts to 1.3 million dollars.

Technical Institute of Alamance

Dental Assistant Program. The Institute offers a dental assistant training program only and is directed by Dr. Phillip Savage with the able assistance of Mrs. Mildred Lynch, D.C.A. and Mrs. Margaret Hooper, C.D.S. Four dentists serve as part-time instructors. The curriculum of four quarters is similar to other programs in the State.

Twenty-two students were selected this year from a total of 70 applicants. Preliminary screening is conducted by guidance counselors, but final interviews and selection are made by the dental assistant faculty. Two scholarships sponsored by the Alamance Caswell Dental Society provide financial assistance to needy students.

The students clinical training begins at the school with introductory phases given by Dr. Savage and staff; however, the bulk of clinical training is given and experience gained in selected dental offices in Alamance County.

The current building program which includes moving to a new campus will increase clinical facilities, laboratory area, lecture halls and faculty offices. The program has good support of the local dental society.

Asheville-Buncombe Technical Institute

Asheville-Buncombe Technical Institute is located in Asheville and offers both dental hygiene and dental assisting programs. Both programs are adequately staffed with qualified dental hygienists and dental assistants for the number of students enrolled in each program. Dr. Baker M. Hamilton is the Chairman of the Dental Programs.

Dental Hygiene Program. The Dental Hygiene Program has been operating under accreditation eligible status which is the

highest status granted to a new program. The school is undergoing on-site visit by the Council on Dental Education January 14 and 15, 1974, and the results of the survey will be available May 6, 1974.

There were sixteen dental hygiene students in the first class, all of whom are continuing in their second year of training; these are to be graduated in June, 1974. The second class has entered with sixteen students. All appear to be progressing nicely at the present time.

This program is on an accelerated schedule running continuously for eighteen months or seven quarters. During the past year a third hygiene instructor was added to the program. The Dental Hygiene Clinic is equipped with twelve dental chairs and twelve mobile units, two sterilization areas, two x-ray treatment rooms, one processing area and one central supply area. Laboratory space is more than adequate and the students have their own locker and lounge area.

The Dental Hygiene Program has an advisory committee consisting of seven dentists from the local dental society and three practicing dental hygienists from the community.

Dental Assisting Program. The Dental Assisting Program has a capacity of sixteen students and currently has an enrollment of thirteen students. The curriculum consists of four quarters running continuously for twelve months, from September through August. The first class graduated thirteen dental assistants, all of whom are gainfully employed at the present time.

The Dental Assisting Program opened under preliminary provisional approval, was surveyed by the Council on Dental Education in June 1973, and was changed to a fully accredited status December 1973.

During the first year of operation twenty-five local dental assistants completed a course on dental roentgenology and fifteen more completed the course in January of this year. This type of program is an asset to the profession in continuing education for dental auxiliary personnel.

Coastal Carolina Community College

Coastal Carolina Community College has both Dental Hygiene and Dental Assistant Programs. The Dental Hygiene Program is a two-academic year or six quarter program with graduates receiving an Associate in Applied Science Degree. The Dental Assistant Program is a one calendar year or four quarter program. Both programs are under the leadership of Dr. Salvatore Cordaro, Chairman of Allied Health Occupations Division.

Dental Assisting Program. This program, which is fully accredited by the American Dental Association's Council on Dental Education, is under the direction of Sue S. Slaughter, C.D.A., with one parttime instructor and Dr. Cordaro assisting. Twenty students were selected for its fourth year's program out of 62 applicants through the use of mental aptitude and dexterity tests.

In addition to the use of the dental clinic facilities at the school, the Dental Assistant student receives even more of her clinical practice in the facilities off campus consisting mainly of the Dental Clinics of the Camp Lejeune Marine Corps Base including Operating Room training in the Oral Surgery Department of the U. S. Naval Hospital at Camp Lejeune. Fifteen dentists in the Jacksonville area provide additional clinical training for the student in private practice.

The Dental Assistant Program offers Continuing Education Courses for the graduate dental assistant. These courses are approved by the Certifying Board of the American Dental Assistants Association.

Dental Hygiene Program. This program is in its second year and expects to graduate its first class of nineteen students in May, 1974. An "accreditation eligible" status is now in effect for this program and full accreditation is being sought in January, 1974, when the school will be visited by the American Dental Association's Council on Dental Education.

Dental hygiene applicants must take the Dental Hygiene Aptitude Tests sponsored by the American Dental Hygienist's As-

sociation and high school credits in chemistry, algebra and biological sciences are required.

The program has two fulltime and one parttime dental hygienists on the faculty under Roxie Stitzer, R.D.H., Department Head.

A new Health Sciences Building is proposed for 1977 which will facilitate the Dental and Nursing Programs at Coastal Carolina Community College on its new campus on Western Boulevard, Jacksonville, North Carolina.

Durham Technical Institute

Dental Laboratory Technology Program. This program at the Durham Technical Institute is very ably directed by Mr. William Rodgers. Mr. Rodgers has directed the program now for some six years and has been largely responsible for the fine program that exists there.

Prior to this year, the program consisted of two classes. Forty students are enrolled in September in the freshman class, and due to attrition, the number drops to approximately thirty by the time the freshmen become second year students.

Beginning this year on March 5, an additional new freshman class will be enrolled. This class will be limited to twenty students. This is being done in an effort to train more people in the limited facilities that now exist. It will be accomplished by overlapping laboratory hours and teaching at night. The day class will operate from 8 a.m. until 5 p.m. and the evening class will operate from 1 p.m. until 10 p.m.

At present there are five fulltime instructors and one more will be added in the spring. The ADA Council requires one instructor for each 14 students, and when the new class is integrated into the program along with the existing two classes, the teaching staff will be operating at peak load ability.

There are no dentists on the fulltime faculty of the school, but UNC Dental School and Hygiene School faculty provides about 16 hours of guest lectures per year.

This is a very motivated and enthusiastic group of students and they are very dentally conscious. They are acutely interested in our State and District Dental Society Meetings and would welcome the opportunity each year on a continuing basis to be invited to give a table clinic or exhibit at our State Meeting in Pinehurst, and our District Meetings throughout the State.

Guilford Technical Institute

Guilford Technical Institute offers fully accredited courses in dental hygiene and dental assisting.

The first year class in dental hygiene has an enrollment of thirty students and anticipates an enrollment of thirty students September, 1974. The second year class has 27 students. Twenty-three graduates last year successfully passed National Hygiene and State Boards and are presently employed.

The Dental Assistants Class has twenty-four enrolled and anticipates twenty-five students to enroll in September, 1974. Seventeen students have been certified by National Boards.

The teaching staff is adequate and qualified. New members have joined Guilford Technical Institute this past year and should assure continued progress in all programs directed by Dr. George Mayer since 1968.

Charles S. Scruggs, retired Navy Captain, became associate director of the dental program at Guilford Technical Institute September, 1973.

Mrs. Ann Kevelich has accepted the responsibility of basic science instructions.

Mr. David Walten has established a fulltime audio-visual educational department responsible for utilization of available materials and the development of new material.

The students from Guilford Technical Institute participated in a Health Fair at Greensboro sponsored by the Greensboro Junior League and the Medical and Dental Auxiliaries. Audio-visual tapes were made by students from Guilford Technical Institute and supplemented the program and material presented by the senior dental students. The Health Fair presented to third grade students was considered most successful.

Western Piedmont Community College

This school is located in Morganton, North Carolina and offers a twelve months course in dental assisting, x-ray technology, and continuing educational courses for dental assistants and hygienists. The program is directed by Dr. George Johnson and assisted by Dr. Guy Huggins. Also, one fulltime certified dental assistant and one parttime dental hygienist constitute the faculty. The faculty members alternate their time with the Western Carolina Health Center in Morganton.

The school has a capacity of sixteen students and presently there are sixteen students enrolled in the twelve months course. In February, 1974, it is anticipated there will be ten to twelve students enrolled in the eleven week dental x-ray technology course.

Two screening tests are given: GATB and the standard CGP. There were eighteen applicants for the 1973-74 program and sixteen accepted. Seven graduated in August, 1973 and all are employed in dental offices in the immediate area.

Continuing education courses for dental assistants in sterilization technique, and model fabrication will be given at an early date. Also, continuing education courses for hygienists will be given in conjunction with students at the Asheville-Buncombe Technical Institute.

The new dental building will be completed in March, 1974. It will be complete in virtually all aspects with a total of fifteen rooms, six dental treatment rooms, complete facilities for general anesthesia, closed circuit TV, 12 x 24 conference room and a library. Over \$100,000.00 of new equipment will be installed in this new structure.

The school has an advisory board of seven local area dentists and one certified dental assistant. Area high schools are continually informed of the curriculum pertaining to dental assisting leading to Certified Dental Assistants.

Central Piedmont Community College

Central Piedmont Community College has two dental programs, Dental Assisting and Dental Hygiene.

The Dental Assisting Program consists of four consecutive quarters duration with an enrollment of 17 students selected on a first come first served basis. Two classes are admitted each year, one at the beginning of the fall quarter and the other at the beginning of the winter quarter. Much of their clinical experience is obtained in a modern three chair operatory clinic located in the college and manned by dentists employed by the Public Health Department. The rest of the clinical training is obtained in selected private dental offices closely supervised by the faculty. Their training leads up to certification.

The Dental Assistant Program has graduated over 185 assistants. To the best of our knowledge, all graduates who wish to be are gainfully employed. All are being prepared for expanded duties within the legal limitations prescribed.

The Dental Hygiene Program is a seven consecutive quarter program which enrolls a freshman class of 40 to 45 and graduates an average of 33 students. In both programs there is a long waiting list. The selection of the 1974 class was made by December of 1973 and requests for the class beginning fall 1975 are already in. Most of the students take one year of related work while waiting for entry into the program. Again, selection is made on the first come first served basis. Of course, certain minimum requirements must be met (placement testing); however, if the student does not meet these then he or she is given the opportunity to remedy these deficiencies. Due to the fact that nearly every applicant has been recruited by a dentist or a hygienist the caliber of the applicant in most cases is quite high.

The student receives clinical training in our 32 chair dental clinic (plus a 4 chair radiographic clinic) with a clinical supervision ratio of one instructor per 6 plus students. Part of their instruction in the clinical area takes place in the Veterans Hospital Dental Clinic located at Salisbury, North Carolina. Each student spends one week each quarter at that installation. In

addition each student spends 15 hours giving dental health education presentations in the public schools.

We are indebted to the North Carolina Dental Foundation for many improvements in our facilities. Dr. Nisbet here in Charlotte has helped us greatly in our planning.

By the start of the fall quarter our dental facilities will be re-located in a newly constructed Health Careers Building. The Dental Programs will occupy the entire first floor of the five story building. The operatories will be increased to six in the dental assisting section, the laboratory stations will be increased from 16 to 24, and the dark room facilities will be enlarged. It is planned to greatly increase our audio visual material so that the student may employ these methods in addition to the traditional methods.

In the course of the Dental Hygiene Program begun in 1965, approximately 231 students have graduated, all of whom have passed their national boards and are licensed. To the best of our knowledge all are employed who wish to be.

We have had quite a few Continuing Education Programs during the past year for dentists, and auxiliary personnel including the regular annual seminar at which General Shira (Ret), Dean of Dental School at Tufts University was the speaker. We are also involved with the AHEC Program and are visited weekly by senior dental students from the University of North Carolina.

Fayetteville Technical Institute

This institute offers both dental hygiene and dental assistant training and is under the direction of Dr. David Dunham, Director of the Dental Section.

Dental Hygiene Program. The third dental hygiene class entered in the fall of 1973. Twenty students are expected to graduate in June. The equipment is adequate, including a closed circuit television utilized in daily teaching.

Dentists who have hired graduates from this program are complimentary of the hygienists' performances.

Dental Assisting Program. This program began its first class this year enrolling 17 students. In addition to regular duties the students are being familiarized with expanded duty functions.

The local dental society has established a loan fund for the benefit of needy students in both of these programs. The society has also co-sponsored with Fayetteville Technical Institute a continuing education program in Nitrous Oxide Analgesia in May 1973. This course was well attended.

The programs at Fayetteville Technical Institute are well received and playing a vital role in supplying auxiliary personnel in that area.

Wayne Community College

This school offers training in both dental hygiene and dental assisting and is under the direction of Dr. Fred Sproul, Director of Dental Department.

Dental Hygiene Program. This is a 19½ months program with approximately 30 students in each class. To date 99 students have been graduated. As of January 1974, 83 applications have been received for the 1974 class. The college provides a placement test that indicates verbal, math and intelligent quotient scores. The dental department also utilizes a dental hygiene aptitude test for science, general information, advanced math and study skills.

Present facilities are not adequate; however, future plans provide for addition of 34,000 square feet Allied Health Building in approximately four years.

Dental hygiene students receive 40 hours dental assisting training and all graduates are currently licensed.

Dental Assistant Program. This program enrolls 21 in the current class and has graduated 161 dental assistants since 1963. To date 18 applications have been received for the 1974 class.

Facilities and space, as in dental hygiene, are not adequate but sufficient space is anticipated within four years.

Wayne Community College supplies facilities for regional

study clubs and local dentists for continuing education courses. Local dentists also use the facilities for cancer clinics.

Dental Auxiliary Teaching Education Students (DATES) from the University of North Carolina, School of Dentistry do teaching internships at this school.

Conclusion

Because of the very fine job of training dental manpower accomplished by the various schools across the State, and because of their interest in the profession's activities so closely aligned with their effort, this committee feels that each school should be invited to present a scientific exhibit of their choosing at our annual meeting at Pinehurst each year.

Resolutions

This report is informational in nature and no resolutions are submitted.

DENTAL EDUCATION COMMITTEE

Subcommittee on Continuing Education

J. HARRY SPILLMAN, *Chairman*

CECIL A. PLESS, JR.	JUDY MILLSPAUGH
J. FRED SPROUL	LUNDEE AMOS
WILLIAM C. KEITH	LINDA HEFFINGER
WILLIAM H. PRICE	LURLENE MEDFORD
JON W. COUCH	
ROY L. LINDAHL, <i>Consultant</i>	

Meetings. The Subcommittee held no meetings.

Assignments. The 1973 House of Delegates adopted the following resolution (26-1973-H):

"Resolved, that the formation of the new Continuing Dental Education Committee of North Carolina represents a forward step in a coordinated approach in providing quality continuing dental education to dentists and their auxiliaries in North Carolina and be it further

Resolved, that the North Carolina Dental Society pledges its support of this new committee."

Activities. The Chairman, representing this Subcommittee and the North Carolina Dental Society, attended meetings of the Continuing Dental Education Council of North Carolina (formerly designated the Continuing Dental Education Committee of North Carolina) together with the President and President-Elect of the North Carolina Dental Society. These meetings were held in the Central Office in Raleigh on August 8, 1973 and February 9, 1974. The principal business transacted at these meetings was the drafting of the Bylaws of the Council. A copy of the final draft, which is to be submitted to the Parent Organizations of the members of the Council for their approval is attached to this report. An appropriate resolution appears at the end of this report.

Resolutions

11. Resolved, that the North Carolina Dental Society House of Delegates reaffirm its support of the Continuing Dental Education Council of North Carolina by approving the attached Bylaws of the Council.

BYLAWS of the

CONTINUING DENTAL EDUCATION COUNCIL OF NORTH CAROLINA

ARTICLE I

Name—Continuing Dental Education Council of North Carolina hereafter referred to as Council.

ARTICLE II

Objectives:

1. To improve the quality and quantity of dental care available to the citizens of the state.

2. To make quality continuing education opportunities readily accessible to dentists and dental auxiliary personnel in all sections of the state.

3. To keep the cost of participating in continuing education programs at a reasonable minimum.

4. To achieve a high degree of efficiency in distribution, comprehensiveness of subject material, reduce duplication of effort, and develop programs which have a sequential curriculum.

5. To permit identification and cataloging of all continuing education opportunities and to make such information available to all dentists and dental auxiliaries in the state.

6. To continuously monitor, adapt, and improve the system in an effort to improve its operation to meet the above stated objectives.

ARTICLE III

Structure—This Council shall be a non-profit, self-sustaining organization that may, at its discretion, make charges for the service it performs. (Tax exempt status—consult with attorney). It shall be the duty of the Council to serve as the advisory body to the full-time Director of Continuing Education. The Council shall make recommendations on the selection of the Director, conduct continuous evaluation of his performance, and assist him in whatever manner necessary to achieve the objectives of the programs.

ARTICLE IV

Membership—This Council shall consist of one representative appointed by each of the following organizations:

1. The North Carolina Dental Society.
2. The University of North Carolina School of Dentistry.
3. The North Carolina State Board of Dental Examiners.
4. The Dental Foundation of North Carolina, Inc.
5. The Dental Health Section, Division of Health Services, Department of Human Resources.
6. The Old North State Dental Society.
7. The North Carolina Academy of General Dentistry.
8. The North Carolina Dental Hygienists Association.
9. The North Carolina Dental Assistants Association.
10. State Board of Education, Department of Community Colleges.
11. North Carolina Dental Laboratory Association.

ARTICLE V

Officers.

Section 1. The officers of this Council shall serve for one year, or until their successors are installed. They shall consist of a Chairman, Vice-Chairman, and a Secretary-Treasurer and shall be elected by a majority vote of the Council.

Section 2. A fulltime Director of Continuing Education is to be appointed by the UNC School of Dentistry in consultation with the Continuing Education Council of North Carolina.

ARTICLE VI

Amendments. These Bylaws may be amended by two-thirds vote of the members appointed to the Council at a duly constituted meeting provided proposed amendments are presented in writing to each member of the Council fourteen (14) days prior to a meeting in which the amendment is to be considered. The Bylaws may also be amended at any duly constituted meeting by unanimous vote of the members present.

ARTICLE VII

Election and Duties of Officers

1. Election of Officers. Officers shall be elected at the first meeting in each calendar year for a term of office of one year, or until a successor is installed.

2. Duties of Officers.

(a) **Chairman:** It shall be the duty of the Chairman:

1. To serve as presiding officer at all called and special meetings of the Council.

2. To serve as an official representative of this Council in contacts with other public and private organizations or agencies.

(b) **Vice-Chairman:** Serves in absence of Chairman.

(c) **Secretary-Treasurer:** It shall be the duty of the Secretary-Treasurer:

1. To receive and be custodian of the funds of this Council.
2. To be custodian of the Bylaws, Official records and properties of the Council.

3. To have charge of the correspondence, give notice of meetings and keep a record of the acts and proceedings of the Council.

4. To prepare minutes of meetings of the Council, submit such minutes for approval to the Council, and circulate such minutes to the membership.

5. To perform the general duties of Treasurer and such other duties as are prescribed by these Bylaws.

(d) **Director of Continuing Education:**

1. To identify and make evaluation of all existing continuing education opportunities in the state.

2. To study the existing system, determine its strengths and weaknesses in meeting the objectives of the continuing education program as defined above.

3. To design a coordinated comprehensive continuing education program in dentistry for the state which would seek to build on existing strengths and correct deficiencies. Development of components of the programs external to the School of Dentistry is to be accomplished by negotiation and persuasion with various agencies and groups in the profession and in education throughout the state. The Director would have direct responsibility for, and control of, all continuing education programs sponsored by the School of Dentistry. In this capacity, he would report directly to the Associate Dean for Academic Affairs.

4. To continuously monitor, evaluate, and improve the program as it is implemented and developed.

5. To identify and procure funding mechanisms necessary to implement and expand the program in accordance with the objectives of the program.

ARTICLE VIII

Assembly. Meetings of the Council shall be called by the Chairman or written request of four (4) members.

ARTICLE IX

Membership

1. Each member of the Council shall serve a term of office of three years beginning January 1, 1973. New appointments of the Council shall be for a term of three years.

2. **Rotation of Membership.** On December 31, 1975, four members of the Council as designated by the Chairman will be replaced by appointments made by their parent organization for a term of three years. On December 31, 1976, four of the remaining members of the original Council will be replaced by appointments made by their parent organization for a term of three years. On December 31, 1977, the remaining three members of the original Council will be replaced by appointments made by their parent organization for a term of three years. This method of rotation will continue in the future. All members will be limited to two consecutive terms.

3. The Chairman may contact the parent organization after a member misses two consecutive meetings for a replacement, if he so desires.

ARTICLE X

Quorum. A quorum of the Council shall consist of not less than seven members.

ARTICLE XI

Resignations. Resignations from this Council shall be filled by their parent organization to serve out the term of office. Resignation is automatic if a member is no longer affiliated with the parent organization.

DENTAL EDUCATION COMMITTEE

Subcommittee on Dental Hygienists

JAMES M. ZEALY, *Chairman*

VICTOR L. ANDREWS

JUDY MILLSPAUGH

KEITH L. BENTLEY

JOSEPH R. SUGGS

NORMAN B. GRANTHAM, JR.

CAREY T. WELLS, JR.

C. R. VANDEROORT

Meetings. The subcommittee held meetings on October 27 and December 8, 1973.

Assignments. Clarification of purposes of subcommittee.

Results of Study. The Dental Education Committee Subcommittee on Dental Hygienists is the only official contact between the North Carolina Dental Society and the North Carolina Dental Hygienists Association. The recent function of this subcommittee has been primarily concerned with liaison which is alien to its original purpose.

Resolutions

Resolved, that a new committee shall be created for the express purpose of liaison between hygienists and dentists and that it be named the Committee on Liaison—NCDS—NCDHA, and be it further

Resolved, that the general purpose of the new committee will be:

1. To establish better rapport between the North Carolina Dental Society and the North Carolina Dental Hygienists Association.

2. To assimilate and disseminate information pertinent to both organizations, and that

3. To take any direction the President of the North Carolina Dental Society may specify.

DENTAL HEALTH COMMITTEE

ZENO L. EDWARDS, JR., *Chairman*

(1973)

FRANK MARTIN

E. A. PEARSON, JR.

ROBERT TAYLOR

ALTON SMITH

JACK MENIUS

RALPH YOUNG

BREECE BRELAND

Meetings. No meetings were held this year as the program for the year was planned last year.

Assignments. The 1973 House of Delegates adopted a resolution that directed the Dental Health Committee to continue to investigate and evaluate dental care provided in various state institutions. (Trans. 31-1973-H).

The 1973 House of Delegates suggested that the appropriate people be sent a copy of last year's report. (Trans. 32-1973-H).

Copies were sent to the following: Mr. David Flaherty, Secretary of the Department of Human Resources; Mr. Jones, Secretary of the Department of Social Rehabilitation and Control; Mr. Lee Bounds, Director of Prisons, since retired; Superintendent of Dorothea Dix; Mr. Dave Henry, Medical Services, since retired.

Mr. Henry acknowledged receipt. No one else replied.

Results of Study. The members of this Committee agreed that it was impossible for such a small group to check every facility in the state. Thanks to Dr. Ralph Young and his department a map was drawn along district lines and every state institution listed. At this point the presidents of the five districts were sent a list of the facilities within their districts. They were asked to have their places checked and report on the dental care. The members of the central committee were available for consultation. The questionnaires used last year were sent to them to use as a guide. I enclose in this report a list of the agencies with a check showing the agencies visited. As can be seen the job is far from complete. A few of the key agencies have yet to be checked. This Committee is indebted to the many men who made the visitations. Their individual reports are part of the file but not included in the report for brevity.

It is obvious from the reports of the prison units that the state policy is being carried out in the various camps. The universal report is that emergency treatment is available in all the prison units. Work release prisoners can have dental work done if they pay for it. In some camps all prisoners can have this done. If the work is extensive, the prisoner is returned to Raleigh. Generally, extensive means extractions and dentures.

The dental care would appear to be adequate in the orphanages. This ranges from free services to contract work.

The report on the mental institutions is incomplete but the report on those in the fifth district is extremely good. This was done by Matt Delbridge. The file will show recommended dental standards for mental institutions as proposed by the American Association on Mental Deficiency. A few conclusions should be noted:

1. The facilities at **Cherry Hospital** are adequate. Facilities at **O'Berry Center** are being updated now. Facilities at **Caswell Center** are not adequate for the proper management of handicapped patients. Facilities at **Wilson Sanitorium** are adequate for present needs.

2. The main request of men who work in these areas is that they be provided more adequate pay scales for assistants, clerical help, hygienists and themselves. The discrepancy between medical men and dental men seems to be out of line so far as salary is concerned.

The last report of this Committee made a number of suggestions. There is tangible evidence that the first two have been adopted as evidenced by the letter in the January JOURNAL of the North Carolina Dental Society from David Jones. Bill Dennis has been appointed deputy dental director and new equipment has been installed at Womens Prison. It is hoped that the others will be considered.

Resolutions

This report is informational in nature and no resolutions are submitted.

FIRST DISTRICT

Correctional Centers

Western	Morganton
Haywood County	Hazelwood
Henderson*	Hendersonville
Craggy Prison	Asheville
Cleveland Prison*	Shelby
McDowell Prison*	Marion
Rutherford Prison*	Forest City
Avery Prison	Newland
Watauga Prison*	Boone
Yancey Prison	Burnsville
Caldwell Prison*	Hudson
Catawba Prison*	Newton
Gaston Prison	Dallas
Lincoln*	Lincolnton
TB Sanatorium—Western North Carolina.....	Black Mountain

Mental Health Facilities

Broughton Hospital	Morganton
West Carolina Center.....	Morganton

Youth Development Center

Juvenile Evaluation Center.....	Swannanoa
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Orphanages

Snipes Orchard Home.....	Conover
Alexander Schools, Inc.*	Union Mills
Broyhill Home*	Clyde
Cherokee Boys Club Children's Home.....	Cherokee
Crossnore School, Inc.	Crossnore
Eliada Home*	Asheville
Grandfather Home for Children*	Banner Elk
Presbyterian Home	Black Mountain
South Mountain Institute*	Nebo

SECOND DISTRICT

Correctional Centers

Davie County	Mocksville
Union County	Monroe
Cabarrus County	Mt. Pleasant
Mecklenburg County No. 1	Huntersville
Charlotte Advancement Center.....	Charlotte
Rowan County	Salisbury
* Visited	
Iredell County	Statesville
Alexander County	Taylorsville
Wilkes County	North Wilkesboro
Yadkin County	Yadkinville
Stokes County	Walnut Cove
Forsyth County	Winston-Salem
Davidson County	Lexington

Youth Development Center

Stonewall Jackson Home	Thomasville
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Orphanages

Baptist Children's Home	Thomasville
Mills Home	Thomasville
Barium Springs Home	Barium Springs
Boys Home of North Carolina	Huntersville
Boys Town of North Carolina	Charlotte
Church of God Orphanage	Kannapolis
Children's Home, Inc.	Winston-Salem
Junior Children's Home	Lexington
Nazareth Children's Home	Rockwell
Thompson Children's Home	Charlotte
Alexander Children's Home	Charlotte

THIRD DISTRICT

Correctional Centers

Blanch Prison*	Blanch
Anson County*	Wadesboro
Richmond County	Rockingham
Moore County*	Carthage
Montgomery County*	Troy
Stanly County*	Albemarle
Randolph County*	Asheboro
Durham County	Durham
Orange County*	Hillsborough
Guilford County*—I	High Point
Guilford County*—II	McLeansville
Rockingham County*	Reidsville
Caswell County*	Yanceyville
Alamance County	Graham
Person County*	Roxboro

Youth Development Centers

Samarcand	Eagle Springs
Mason School	Hoffman
TB Sanatorium—Gravely*	Chapel Hill

* Visited

Orphanages

Elon Home for Children*	Elon College
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FOURTH DISTRICT

Mental Hospitals & Centers

Dorothea Dix*	Raleigh
John Umstead Hospital	Butner
Murdoch Center	Butner
TB Sanatorium—N. C. Sanatorium	McCain

Youth Development Centers

Leonard School	McCain
C. A. Dillon.....	Butner

Orphanages

Odum Home	Pembroke
Boys Home of North Carolina.....	Lake Waccamaw

Catholic Orphanage of North Carolina	Raleigh
Central Orphanage	Oxford
Falcon Children's Home	Falcon
Freewill Baptist Home	Middlesex
Methodist Home for Children	Raleigh
Oxford Orphanage	Oxford

Prisons & Correctional Centers

Central Prison*	Raleigh
Correctional Center for Women*	Raleigh
Johnston Youth Center	Smithfield
Central Youth Center	Raleigh
Polk Youth Center*	Raleigh
Sanford Advancement Center	Sanford
Wake Advancement Center	Raleigh
North Center Correctional Center*	
Franklin County Correctional Center	Bunn
Vance County	Henderson
Warren County	Warrenton
Greenville	Oxford
Person	Roxboro
Umstead Youth Center	Butner
Sampson County	Clinton
Harnett Youth Center	Lillington
Bladen County	Elizabethtown
Robeson	Lumberton
Scotland	Wagram

* Visited

FIFTH DISTRICT Correctional Centers

Columbus County*	Brunswick
New Hanover County*	Wilmington
Pender County*	Burgaw
Greene County*	Maury
Carteret County*	Newport
Duplin County	Kenansville
Goldsboro Youth Center	Goldsboro
Currituck County	Maple
Gates County	Gatesville
Martin County	Williamston
Washington County	Creswell
Odom	Jackson
Caledonia	Tillery
Nash Advancement*	Nashville
Halifax	

Mental Hospitals

Cherry Hospital*	Goldsboro
O'Berry Center*	Goldsboro
Caswell Center*	Kinston
TB Center—Eastern N. C. Sanatorium*	Wilson

Youth Development Centers

Dobbs School*	Kinston
Fountain School*	Rocky Mount

Orphanages

Kennedy Home*	Kinston
Episcopal Home Care	Goldsboro

Correctional Institutions

Goldsboro State Hospital*	Goldsboro
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DENTAL HEALTH COMMITTEE

Subcommittee on Cancer

JEREMIAH N. PARTRICK, *Chairman*

WAYNE ANDERSON	JOHN W. BARTS, JR.
E. JEFFERSON BURKES	CLAUDE J. HEARN
WALTER H. FINCH, JR.	WILLIAM G. QUARLES
ROBERT W. HOLMES	CHARLOTTE W. SUTTON
IRVIN A. ROSEMAN	ELIZABETH WADSWORTH
LLOYD B. STANLEY	JOHN D. WARD

Meetings. Committee business was conducted by personal

contact and through telephone conversation between committee members.

Assignments. Continuing education in the field of oral cancer and implementation of oral cancer detection clinics throughout the state.

Committee Activities

1. Major oral cancer detection clinic at the North Carolina State Fair.

Recommendations

1. That E. Jefferson Burkes and William Quarles be given official recognition as leaders of the North Carolina Dental Society for their efforts associated with this subcommittee and especially in the oral cancer detection clinics held at the North Carolina State Fair.

2. Encouragement of further oral cancer detection clinics on the local level.

Resolutions

This report is informational in nature and no resolutions are submitted.

DENTAL HEALTH COMMITTEE

Subcommittee on Minimal Dental Health Standards for State Institutions

FRANKLIN E. MARTIN, *Chairman*

JOHN H. DEARMAN	CLAUDE W. DRAKE
FREEMAN C. SLAUGHTER	RALPH A. YOUNG
JOHN W. MAINWARING, JR.	

Meetings. No formal meetings were held. The members were contacted in September 1973 and requested to study and submit a report to the chairman.

Assignments. The 1973 House of Delegates adopted the following resolution:

Resolved, that a subcommittee be established to arrive at minimal dental health standards for institutionalized people and that the committee also be instructed to arrive at ideal standards.

Results of Study. It becomes quickly apparent that it is a near impossibility to expect to reach all groups of these institutionalized people in the same way. It is also apparent that we in dentistry have been attempting to treat, often repeating our efforts, when more positive preventive programs could be more beneficial. Audiovisual teaching, group demonstrations and discussions could be carried out by a trained auxiliary personnel.

It would seem appropriate to recognize a minimal level to be one beneath which no program would be tolerated. This minimal level must be that any person receiving care is, at the least, not harmed or made worse by treatment, and that in all probability there is benefit, however slight.

The attached appendix of Priority of Need Classification by Max H. Schoen and Jay W. Friedman offers a concise yet comprehensive set of guidelines from which to work.

No conclusions were reached as to one set of ideal standards because so many variables would arise with patients being housed in different types of institutions.

Resolutions

7. **Resolved,** that the North Carolina Dental Society formally declare a sincere interest in the health care of institutionalized persons in the state and that the Dental Health Committee constantly strive to promote better programs for these people.

Appendix B

PRIORITY OF NEED CLASSIFICATION

by

MAX H. SCHOEN and JAY W. FRIEDMAN

Class I: Very Urgent—Functional and Social Disability Conditions Requiring Rapid Attention

- pain and acute infections
- suspected neoplasms

- dental caries into or near the pulp
- teeth obviously requiring extraction
- disfiguring conditions, such as missing or badly decayed anterior teeth

Class II: Moderately Urgent—Conditions Requiring Care Within Six Months

- chronic or subacute periodontal conditions and heavy calcareous deposits
- extensive penetration of caries into dentin
- sufficient missing posterior teeth to require replacement (less than eight opposing posterior teeth)
- space maintenance for children
- replacement of ill-fitting removable appliances

Class III: Non-Urgent—Conditions Requiring Care That Is Postponable for a Period of Time

- periodontal surgery
- incipient caries
- elective 3rd molar extraction
- replacement of missing teeth were fewer than requirements of Class I and Class II conditions
- certain inlays or crowns on teeth previously restored with large amalgams, silicates or stainless steel crowns

Class IV: Maintenance—No Presenting Requirements Except Routine Care

- no apparent pathology
- patients scheduled for routine prophylaxis

* All these Classifications are based upon thorough clinical examination with x-rays and other diagnostic procedures.

DENTAL LABORATORY RELATIONS COMMITTEE

ROBERT B. LITTON, *Chairman*
(1978)

V. L. ANDREWS, JR. (1974)	JAMES L. COX (1976)
M. W. CARPENTER (1974)	ROBERT A. GEORGE (1977)

Meetings. The Committee held meetings on July 28, 1973, August 18, 1973, September 9, 1973, October 7, 1973, December 2, 1973 and February 2, 1974.

Assignments. The 1973 House of Delegates adopted the following resolution: (Trans. 41-1973-H)

"Resolved," that the Dental Laboratory Committee, in consultation with the North Carolina Dental Laboratory Association and the North Carolina State Board of Dental Examiners develop a mechanism for the registration and annual re-registration of dental laboratories and dental laboratory technicians in this State and be it further.

Resolved, that this mechanism be submitted to the House of Delegates for approval."

Results of Study. After several meetings with the North Carolina Dental Laboratory Association and the North Carolina State Board of Dental Examiners, the Dental Laboratory Relations Committee feels that the following resolution and recommendations should be presented to the 1974 House of Delegates. The Committee requests that if the submitted resolution is adopted, the following recommendations be acted upon.

Recommendations

1. A Dental Laboratory Advisory Commission should be formed. Its six members, none of whom could be practicing dentists, would be nominated and elected by registered dental laboratory operators and/or owners and registered dental laboratory technicians. Members of the commission must be registered dental laboratory operators and/or owners or registered dental laboratory technicians.

The drafting and recommending of rules, regulations and registration fees and requirements would be the sole responsibility of the commission, but their final adoption would be the responsibility of the North Carolina State Board of Dental Examiners.

2. The North Carolina Dental Society should recognize the Dental Laboratory Industry as a very vital auxiliary of dentistry and make it more a part of dentistry in North Carolina.

Dental laboratory relations could be improved by instituting the following:

- A. Send notices of all district and state meetings to registered dental laboratory operators and/or owners and dental laboratory technicians.

- B. Let registered dental laboratory operators and/or owners and registered dental laboratory technicians register at district and state meetings and be allowed to attend scientific and general sessions if they so desire.

- C. Have display table for Laboratory Association at State Meeting.

Resolutions

8. Resolved, that dental laboratory operators and/or owners and dental laboratory technicians be required to register and re-register annually on or before January first with the North Carolina State Board of Dental Examiners. The registration fee for dental laboratory operators and/or owners shall be set by the House of Delegates. (Suggested fee range \$10-\$100). The registration fee for dental laboratory technicians shall be set by the House of Delegates. (Suggested fee range \$5-\$25). Employees of dental laboratories who are not technicians would not be required to register, but a list of those employees would have to be furnished annually to the North Carolina State Board of Dental Examiners by the laboratory operators, and be it further

Resolved, that failure to comply with this regulation shall be deemed to be a misdemeanor punishable by a fine or imprisonment or both.

ETHICS COMMITTEE

ROBERT H. GAINNEY, *Chairman*
(1977)

JAMES A. PRIVETTE (1975)	S. H. ISENHOWER (1974)
JOHN A. S. REYNOLDS (1976)	BAXTER B. SAPP, JR. (1978)

Meetings. The Committee held no formal meetings. Business of the Committee was conducted by mail and by telephone.

Assignments. The Committee received no assignments from the 1973 House of Delegates. Several requests for information and rulings were received and resolved on the district level.

One complaint was referred to the North Carolina State Board of Dental Examiners which has been resolved after several weeks.

Resolutions

This report is informational in nature and no resolutions are submitted.

HOSPITAL DENTAL SERVICE COMMITTEE

R. DONALD COFFEY, JR., *Chairman*

THEODORE R. OLDENBURG	W. ROBERT CAVINESS
WILLIAM J. PORTER	JACK A. MENIUS
ERNEST W. SMALL	WALTER R. SECOSKY

Meetings. No formal meetings have been held.

Assignments. The Committee was directed by the 1973 House of Delegates (28-1973-H) to conduct a Hospital Dental Service Survey.

Activities. A) The survey was conducted by mail in September of 1973 among instate membership, 650 surveys were returned, representing 41 per cent participation. The surveys have now been turned over to the UNC School of Dentistry, Department of Oral Surgery for compilation and evaluation. It is hoped that as an immediate result continuing education courses involving hospital dentistry will be increased. Also the material gathered will be used in communication with local Professional Standards Review Organizations.

B) Professional Standards Review Organizations—numerous

informal meetings have been held by the Chairman and other committee members concerning dentistry's portal of entry into the PSRO structure. Initial contact with the North Carolina Medical Peer Review Foundation, Inc. has been made and at this time it appears to be our best avenue. The wishes of the Committee regarding a qualified consultant are to be made known to the President of the North Carolina Dental Society by letter. It should be made clear that this person must be very knowledgeable with hospital services, hospital utilization and review procedures and norms of care for dental patients, since in its initial phase only Medicaid and Medicare in-patient benefits will be subject to review.

Resolutions

This report is informational in nature and no resolutions are submitted.

CHILDRENS DENTAL HEALTH WEEK COMMITTEE

D. ROBERT WILLIAMS, *Chairman*

Assignments. Plans were made and carried out for the 1974 Childrens Dental Health Week.

Future Operations. In order to make the program as complete as possible, each district should have a chairman appointed who is known to the district secretary by June so that information can be spread easily and completely as the planning progresses. This is necessary because the mailings from ADA to local chairmen begin in September.

Resolutions

This report is informational in nature and no resolutions are submitted.

DENTAL PRACTICE ACT COMMITTEE

FRED H. MILLER, *Chairman*

WALTER S. LINVILLE, JR. JAMES A. PRIVETTE

Meetings. The Committee met during the Fifth District Meeting in Wilmington, North Carolina, September 13, 14, 15, 1973.

Assignments. The 1973 North Carolina Dental Society House of Delegates adopted the following resolution:

(Trans. 43-1973-H) Resolved, that the North Carolina Dental Society urge in the strongest manner possible that all parties concerned, within ten days, initiate to seek ways under the present dental law to expedite the completion of the present expanded duty research program at the University of North Carolina Research Center, and be it further

Resolved, that the above include a joint meeting and consultation with the Attorney General by a joint committee made up of representatives from the North Carolina Dental Society, the North Carolina State Board of Dental Examiners, the University of North Carolina School of Dentistry and their legal representatives, if possible, and be it further.

Resolved, that if the above does not result in a method of allowing the study to be completed that the Dental Practice Act Committee be directed to seek changes that would allow the program to be completed.

The Dental Practice Act Committee presented a rough draft of a proposed Auxiliary Research Amendment to the Dental Practice Act of North Carolina to the Executive Committee, North Carolina Dental Society on September 14, 1973.

The Executive Committee and the Dental Practice Act Committee agreed that due to the controversial nature of this issue, that further revisions or corrections to this amendment should be the responsibility of the Executive Committee.

Pursuant to this decision on January 16, 1974, all District Presidents and Delegates received a copy of two proposed Auxiliary Research Amendments to the Dental Practice Act of North Carolina from William A. Current, Chairman, Executive Committee.

A copy of this letter and Amendments is attached to this report.

Recommendations. The Dental Practice Act Committee recom-

mends that the attached amendments dealing with Auxiliary Research be submitted to the 1974 House of Delegates for final action.

Resolutions

This report is informational in nature and no resolutions are submitted.

January 16, 1974

TO: District Presidents and Delegates

FROM: William A. Current, Chairman, Executive Committee, North Carolina Dental Society

SUBJECT: Auxiliary Research Amendments to the Dental Practice Act of North Carolina

At the January 6th meeting of the Executive Committee of the North Carolina Dental Society, the following motion was duly made and passed:

Pursuant to resolution 43-1973-H adopted by the 1973 N. C. Dental Society House of Delegates and subject to the approval of the Dental Practice Act Committee, the Executive Committee endorses in principle the amendments dealing with auxiliary research prepared by N. C. Dental Society legal counsel, but submits these amendments to the 1974 House of Delegates for final action due to the highly controversial nature of the issue and the possibility of creating divisiveness within the profession.

Copies of the two amendments are enclosed. There are two amendments, rather than one, because as explained by legal counsel, it would be necessary not only to amend the Dental Practice Act but also the Dental Hygiene Act inasmuch as both dentists and dental hygienists are licensed under separate acts. G.S. 90-29 (c) lists those acts which shall not be deemed to constitute the practice of dentistry and G.S. 90-233 (c) lists those acts which shall not be deemed to constitute the practice of dental hygiene. The two suggested bills amend each of the respective exemption provisions to add an exemption for dental research projects. The language of the two is virtually identical.

Further questions on these amendments can be submitted to the Society's legal counsel at the 1974 House of Delegates meeting in March.

WAC:fmk

Enclosures

cc—James W. Bawden

Ralph D. Coffey

Cecil A. Pless

A BILL TO BE ENTITLED AN ACT AMENDING SECTION 90-233 OF THE GENERAL STATUTES WITH REGARD TO THE PRACTICE OF DENTAL HYGIENE.

The General Assembly of North Carolina enacts:

Section 1. Section 90-233(c) of the General Statutes is hereby amended by adding a new sub-paragraph immediately after G.S. 90-233(c) (4) to be numbered G.S. 90-233(c) (5) and to read as follows:

"S90-233(c) (5). Any act or acts performed within this State by a dental assistant, or any other person, under the supervision of a dentist licensed to practice in this State which is or are undertaken pursuant to a specific dental research project of the School of Dentistry of the University of North Carolina or of any other governmental body or agency of the State of North Carolina or its political subdivisions and which specific research project has been approved by the Board. The Board shall approve all such specific dental research projects submitted in writing to it within days thereafter which the Board finds meets the following criteria:

(a) The body or agency sponsoring and supervising the dental research project has available and agrees to utilize adequate financial resources and professional expertise for the accomplishment of the project, and

(b) The body or agency sponsoring and supervising the dental

research project agrees to make its findings and conclusions from such research freely available to the public; and

(c) The research protocol and procedures are scientifically satisfactory; and

(d) The health and safety of all persons who participate in the project will reasonably be protected; and

(e) The research procedures on human subjects shall be performed only on persons freely consenting thereto after being informed by a dentist licensed in this State as to the procedure involved, and the training of the individual directly performing the same.

The Board may revoke any approval of a specific dental research project theretofore given by it after hearing afforded to the sponsoring and supervising body or agency upon a finding by the Board supported by competent evidence that the project no longer complies with the criteria hereinabove set forth. Upon disapproval of a specific dental research project or upon revocation of an approval theretofore given, the Board shall promptly inform the submitting body or agency of its action together with specific and detailed reasons for such disapproval or revocation of a prior approval."

Section 2. This Act shall become effective upon ratification.

A BILL TO BE ENTITLED

AN ACT AMENDING SECTION 90-29 OF THE GENERAL STATUTES WITH REGARD TO THE PRACTICE OF DENTISTRY.

The General Assembly of North Carolina enacts:

Section 1. Section 90-29(c) of the General Statutes is hereby amended by adding a new sub-paragraph immediately after G.S. 90-29(c) (11) to be numbered G.S. 90-29(c) (12) and to read as follows:

"S90-29(c) (12). Any act or acts performed within this State by a dental hygienist, a dental assistant, or any other person, under the supervision of a dentist licensed to practice in this State which is or are undertaken pursuant to a specific dental research project of the School of Dentistry of the University of North Carolina or of any other governmental body or agency of the State of North Carolina or its political subdivisions and which specific research project has been approved by the Board. The Board shall approve all such specific dental research projects submitted in writing to it within days thereafter which the Board finds meets the following criteria:

(a) The body or agency sponsoring and supervising the dental research project has available and agrees to utilize adequate financial resources and professional expertise for the accomplishment of the project; and

(b) The body or agency sponsoring and supervising the dental research project agrees to make its findings and conclusions from such research freely available to the public; and

(c) The research protocol and procedures are scientifically satisfactory; and

(d) The health and safety of all persons who participate in the project will reasonably be protected; and

(e) The research procedures on human subjects shall be performed only on persons freely consenting thereto after being informed by a dentist licensed in this State as to the procedure involved, and the training of the individual directly performing the same.

The Board may revoke any approval of a specific dental research project theretofore given by it after hearing afforded to the sponsoring and supervising body or agency upon a finding by the Board supported by competent evidence that the project no longer complies with the criteria hereinabove set forth. Upon disapproval of a specific dental research project or upon revocation of an approval theretofore given, the Board shall promptly inform the submitting body or agency of its action together with specific and detailed reasons for such disapproval or revocation of a prior approval."

Section 2. This Act shall become effective upon ratification.

INSURANCE COMMITTEE

J. S. DIGGS, NELSON, *Chairman*
(1978)

DERWOOD L. ASHWORTH (1974)	THOMAS L. BLAIR (1975)
JOHN S. DILDAY (1976)	DONALD E. BLAND (1977)

Meetings. The Committee held meetings on May 13 and October 7, 1973.

Assignments. The survey and assessment of the various programs endorsed by the North Carolina Dental Society.

Results. A new hospital income program has been instituted with more realistic daily indemnities of up to \$80.00 per day. This has been well received by the members and total enrollment is expected to triple that of the previous program.

In the disability program a new higher insurance weekly benefit (\$500.00) has been put into effect. The participation in this program now exceeds one thousand members. Since students have achieved member status they have become eligible for up to \$100.00 weekly disability and \$25,000.00 term life insurance, also up to \$6,000.00 professional protector plan.

The term life program with Northwestern Life Insurance Company has raised its limits to \$200,000.00, for spouses to \$5,000.00 and for dependent children to \$2,500.00. There will be a rate reduction for members in the 30-35 and 40-45 age categories.

The premium rate of our Blue Cross-Blue Shield policy has been held at its present level in spite of anticipated increases in the cost of hospitalization. Our loss ratio in this area has taken a more favorable trend.

The office overhead policy with Mutual of Omaha has agreed to the 20 per cent reduction of premiums through August of 1974.

Resolutions

This report is informational in nature and no resolutions are submitted.

LEGISLATIVE COMMITTEE

RICHARD H. GRAHAM, *Chairman*

CHARLES T. BARKER	FRANCIS A. BUCHANAN
MOTT P. BLAIR	JON W. COUCH
HAROLD E. MAXWELL	J. B. FREEDLAND

ROBERT H. WATSON

Meetings. No committee meetings were held due to the fact that the General Assembly was not in session. However, the Committee has functioned very effectively by correspondence and by numerous telephone consultations.

Assignments. The Committee received no assignments from the 1973 House of Delegates.

Organization. After studying the situation at length, it was decided further organization of the Legislative Committee could make it considerably more effective in accomplishing its goals.

As a result, extensive work has been done by committee members in recruiting liaison dentists throughout the state and a system devised for contacting almost every legislator in the state when necessary.

This organization is now complete and consists of one committee member serving as chairman of his district of the North Carolina Dental Society. He has appointed two sub-chairmen as liaison dentists and they have each appointed four others, giving a total of eleven men dispersed over each district.

We now have approximately fifty-five dentists scattered throughout the state on this larger committee.

Expression of Appreciation. The Legislative Committee wishes to express its appreciation to the many dentists who have agreed to serve in this capacity for the Society.

Resolutions

This report is informational in nature and no resolutions are submitted.

LONG RANGE PLANNING COMMITTEE

J. B. FREEDLAND, *Chairman*
(1976)

A. C. CURRENT, JR. (1975)	JAMES A. HARRELL (1974)
DARDEN J. EURE, JR. (1978)	J. HARRY SPILLMAN (1977)
GERALD M. CATHEY, <i>Consultant</i>	

Meetings. The Committee held no formal meetings. It was the opinion of Dr. James A. Harrell, President, North Carolina Dental Society that the current agenda of items recommended by this Committee during the past year provided adequate resources for the House of Delegates for the current year. All committee members were apprised of this request.

Resolutions

This report is informational in nature and no resolutions are submitted.

MEMBERSHIP COMMITTEE

GERALD M. CATHEY, *Chairman*

R. H. GRAHAM	JULIAN R. ROGERS
ROBERT M. WILKINSON	JERRY F. WOOD
H. L. KEITH	

Meetings. The Committee held a meeting on December 8, 1973, in conjunction with the 21st Annual District Officers Conference.

Membership 1973. On December 31, 1972, the Society had 1,576 Active and Life members. During 1973 the Society received 90 new members and decreased by 36 members for a new gain of 54 members.

A categorical breakdown of decreased membership follows:

Resigned	9
Deceased	15
Dropped from roll.....	8
Moved out-of-state	3
Retired	1

The 1973 House of Delegates' endorsement of student memberships for the current year represented another first for the NCDS. Presently, there are 138 student members.

Plans are now under way to conduct an active campaign for recruitment of all non-member, licensed dentists in North Carolina. This program will be conducted at the district level and the appropriate listings are in final revision.

Additionally, plans are being developed for a more comprehensive, uniform and formalized induction procedure for new members in each district society next year.

Resolutions

10. Resolved, that it be made a matter of record that the following were dropped from the roll on December 31, 1973, for non-payment of dues in accordance with Article VI, Section 6 of the Bylaws:

First District: John D. Matheson, Virginia Beach, Virginia; John J. Schneider, Asheville.

Second District: Lacy H. Caple, Lexington; James B. Zuccarello, Charlotte; George T. Nash, Charlotte.

Third District: Harrison C. Walker, Jr., Birmingham, Alabama.

Fourth District: None.

Fifth District: Joseph S. Bennett, Greenville, Mississippi; Johnnie D. Hodges, Jr., Wilmington.

NORTH CAROLINA DENTAL POLITICAL ACTION COMMITTEE

HAROLD E. MAXWELL, *Chairman*

THOMAS B. REID, JR.	L. C. HOLSHouser
J. RICHARD COOLEY	MOTT P. BLAIR
FRANCIS A. BUCHANAN	B. W. WILLIAMSON
WILLIAM G. QUARLES	HAL P. COCKERHAM
JERRY F. WOOD	W. H. GRAY, JR.
RICHARD H. GRAHAM	

Meetings. The Committee held meetings on May 13, 1973, August 25, 1973 and February 9, 1974.

Assignments. The purpose of this committee is to raise funds for congressional and legislative candidates who will support the position of organized dentistry.

Results. As of December 31, 1973 the Committee had collected \$9,965.00. \$1,580.00 has been forwarded to ADPAC leaving NCD-PAC with a balance on hand of \$8,385.00. Following extensive evaluation it was determined that during 1974 it would be advisable to support only selected candidates for the U. S. Senate or U. S. House in the general election (not the primary). District NCD-PAC committees have been appointed.

Resolutions

This report is informational in nature and no resolutions are submitted.

PREVENTIVE DENTISTRY COMMITTEE

RALPH A. YOUNG, *Chairman*

M. W. ALDRIDGE	FRED H. MILLER
CLAUDE W. DRAKE	J. FRED SPROUL
CARLE W. MASON	

Meetings. The Committee met on January 10, 1974.

Assignments. The 1972 House of Delegates adopted the following resolutions: (Trans. 1972, 85-86)

Resolved, that the Preventive Dentistry Committee pursue funding of its state-wide community based programs in the state legislature.

Resolved, that the Preventive Dentistry Committee continue to promote continuing education opportunities regionally across the state to assist practicing dentists in establishing meaningful in-office preventive programs based on the latest techniques.

Preventive Dentistry Program for North Carolina. The Committee developed a state-wide network of support among dentists, other professions, lay groups and individuals, for H.B. 884, titled: Preventive Dentistry. The bill, sponsored by Mrs. John Chase of Wayne County and Mr. Ernest Messer of Haywood County, was described as an act to appropriate certain funds to the State Board of Health to provide for fluoridation of certain rural school water systems, to supplement the preventive dental health programs and supportive services. The total amount of money asked for in the bill was \$341,176. Thanks to the interest of the sponsors and other legislators, plus the tremendous amount of support offered by Society members and other interested parties, the bill was passed in a somewhat revised form. New monies provided the State Board of Health for support of the aforementioned programs totaled \$261,392. This will allow rapid expansion of the rural school water fluoridation program, and the school dental health education and prevention program as carried out by public health dental hygienists.

The Preventive Dentistry Committee is proud to have had the responsibility of causing this landmark legislation to be introduced, and also to have organized and directed the support system which resulted in its passage. The entire membership should also be proud of the overwhelming response of the many individual members who actively supported passage of this bill.

However, we should keep in mind that this is only the first phase of the North Carolina Dental Society's ten-year plan aimed at reducing dental disease among all North Carolinians with these specific objectives:

—By 1983 to achieve a twenty-five percent reduction in its expected dental disease in the population twenty years of age and under.

—By 1983 to achieve a forty percent reduction in expected dental disease in the population ten years of age and under.

In order to reach these stated objectives, continuing financial support must be obtained from the state legislature and other sources. In addition, every Society member must personally dedicate himself to support the program in a meaningful way.

Various program areas now being implemented or to be implemented during the ten-year period are:

—Matching grant funds are to be continued to communities to encourage the fluoridation of public water supplies whenever possible.

—Funds are to be continued to provide the installation of fluorinators in rural school water systems.

—School children will receive topical fluoride applications through the use of fluoride mouthrinses or other techniques suitable for use on a mass basis.

—A scientifically accurate and improved instructional package on dental health and personal dental care is to be developed for use in North Carolina schools. Pre-service and in-service programs are to be provided for North Carolina teachers to improve their capability for teaching sound principles of dental health.

—Continuing education courses for dentists and dental auxiliaries are to be developed to encourage heavier orientation of practitioners to prevention of disease. Such courses are to be made available to every dentist in the state.

—Prevention education and training for consumer groups, both urban and rural, is to be made available and fostered to bolster the preventive training made available in the schools.

—A dental health education program is to be channeled to the public through mass media communications vehicles such as television, radio and the press.

It can be readily seen that such a massive undertaking will require the real support of every dentist and dental auxiliary in North Carolina in order to be successful.

Steering Committee for Preventive Dental Health Education in Schools. A steering committee has been appointed to develop certain phases of the program, especially those related directly to services for school children and school teachers. The North Carolina Dental Society and the Preventive Dentistry Committee are represented by Dr. Fred H. Miller, Dr. C. W. Mason, Dr. William Stanmeyer and Dr. Ralph Young. Other members of the steering committee represent the Dental Health Section, School of Dentistry, State Dental Hygienists' Association and the State Department of Public Instruction.

Preventive Dentistry Slide Series. The Preventive Dentistry Committee has produced and made available to Society members a series of slides on one technique of plaque control along with appropriate case histories. The slide series is housed in the Central Office and is available on loan to any Society member.

American Dental Association Science Writers Award, 1973. The Preventive Dentistry Committee sponsored an entrant for the American Dental Association Science Writers Award for 1973. The entrant, Betty Debnam of Raleigh, publisher of the "Mini Page," was sponsored by her story "Plaque Free in '73," the theme for Dental Health Week, February 4-8, 1973.

The Committee is happy to announce that Betty Debnam was selected as an "Award of Merit" winner for which she received a plaque from the American Dental Association. The plaque was presented to Ms. Debnam by President James A. Harrell during the District Officers Conference, December 1973.

Other Activities. The Preventive Dentistry Committee through its individual members participated in supporting the North Carolina State Fair mouth-screening program and the North Carolina Chapter of American Society for Preventive Dentistry Continuing Education Program featuring Robert Barkley.

The Preventive Dentistry Committee continues to work with Delta Dental Plan of North Carolina, Inc., to insure that reasonable preventive services are to be included in packages developed by Delta Dental Plan.

Resolutions

This report is informational in nature and no resolutions are submitted.

PREVENTIVE DENTISTRY COMMITTEE

APPENDIX I

STEERING COMMITTEE ON SCHOOL DENTAL HEALTH

CARLE W. MASON, JR.

In August of 1973, a meeting was held at Quail Roost in Durham County to discuss the possibilities of a Preventive Dentistry Program in the public schools. Members of the North Carolina Dental Society, the Department of Public Instruction, the Dental Health Section, the Dental Hygienists Association, the Dental Assistants Association, the School of Dentistry and various members of the teaching profession were present. The outcome of this meeting was the formation of a steering committee to study and implement a Preventive Dentistry Program into the school system. Members of each of the above mentioned groups were appointed to this committee, to serve for an indefinite period. Dr. Carle W. Mason, Jr. and Dr. Fred H. Miller were appointed to represent the North Carolina Dental Society.

The first meeting of the Steering Committee was held on October 22, 1973, in the Department of Education. A tentative program was developed during this meeting which suggested a fluoride program to be started in grades K-3 with additional education in plaque control and nutrition. Grades 4-8 would be involved in actual plaque control programs in the schoolroom learning these skills on a daily basis. Projected costs were discussed and ten counties chosen as likely starting areas for this program. It was decided that teacher workshops would be the pivotal point to the whole program.

The next meeting of the Steering Committee was held on November 21, 1973. The main item of business in the meeting was discussion on funding for a program of dental health for the school system. Various possibilities were discussed for obtaining funds for this purpose. A short term program to be begun this current school year was discussed and it was decided that this should be done in ten counties, limited to one or two schools in each county. The purposes would be to determine the costs, manpower requirements and problems so that subsequent programs might be more efficient.

In addition, continued work on the long range program would continue. The long range goals would be to institute a dental health program in all the schools in the State of North Carolina in ten years. A dental health guide was to be prepared for all the teachers involved in this dental health program and ultimately to be given to all teachers throughout the State of North Carolina. This would be a comprehensive guide discussing plaque control, nutrition, etc.

The short program for schools to be used this year was discussed and further development was arranged. Counties to be used this year were Carteret, Craven, Cumberland, Jackson, Moore, New Hanover, Pitt and Wilson. This program would be primarily staffed and produced by the local dentists. The Department of Public Instruction as well as the local dental societies were involved and urged to take an active part. Work was to be continued on the teacher guide and copies of the first draft would be circulated to the members of the Steering Committee for their evaluation.

The next meeting of the Steering Committee was held on January 10, 1974. Plans were finalized for the plaque control program to be instituted in the few counties this school year was discussed. It was decided that February 3-10, National Children's Dental Health Week, would be an ideal time to do this. Discussion continued on the teacher guide for the dental health program in the schools and copies of draft no. 2 were mailed to the Committee and evaluated prior to the meeting. Typing of the master draft would begin soon and a copy of the master draft would be sent to all participating dentists and teachers for their use for experimental purposes only. Their suggestions and comments would be used for preparation of the final draft. Further discussion was held concerning the financial

support for next year's program which would involve as many counties as possible in a county-wide program.

It is quite evident from the minutes of the above meetings that in order for this program to be successful two things will be required from the Dental Society. The first will be unqualified participation by the dentists of the Society in their various communities. The other requirement will be money. The Dental Society must take an active part in the securing of funds for these programs, whether the funding comes from the legislature or from other sources.

PROFESSIONAL RELATIONS COMMITTEE

SAMUEL H. ISENHOWER, *Chairman*

F. A. BUCHANAN	JOE B. ROBERSON
R. HOGAN GASKIN, JR.	MICHELL W. WALLACE
CHARLES P. GODWIN	WILLIAM G. DAVIS
L. DOYLE PRUETT	JAMES H. EDWARDS
HERBERT W. GOODING	D. F. HORD
KENNETH D. OWEN	R. BRUCE WARLICK

Meetings. No formal meetings of the entire committee were held. Business was conducted through correspondence and telephone.

Assignments. The 1973 House of Delegates instructed the Committee to establish as many Professional Relations Committees among the membership of the North Carolina Dental Society as possible. It also directed the Committee to determine the number of committees already in existence.

Results of Study. After studying the committees listed in the back of the 1973 North Carolina Dental Society Directory the chairman of the committee contacted all district presidents and secretaries asking them to search their districts for Professional Relations Committees in their various study clubs and to forward them to the state chairman. Where there were no existing committees, the officers were asked to urge the study clubs to establish such a committee and to forward the names of the committee members to the state chairman.

The committees are listed below:

I. District Professional Relations Committees

Professional Relations Committee, North Carolina Dental Society, Samuel H. Isenhower, Chairman

First District. Buchanan, Francis A., Oakley Medical Building, Hendersonville, North Carolina 28739; Hord, D. F., Box 248, Kings Mountain, North Carolina 28086; Roberson, Joe B., 1087 Hendersonville Road, Asheville, North Carolina 28803.

Second District. Pruet, L. Doyle, Box 918, Elkin, North Carolina 28621; Owen, Kenneth D., 1201 East Morehead Street, Charlotte, North Carolina 28204.

Third District. Warlick, R. Bruce, Box 331, Southern Pines, North Carolina 28387; Davis, William G., Medical Arts Building, Chapel Hill, North Carolina 27514.

Fourth District. Edwards, James H., 3137 Essex Circle, Raleigh, North Carolina 27608; Wallace, Mitchell W., Spring Lake, North Carolina 28390.

Fifth District. Godwin, Charles P., Box 294, Rocky Mount, North Carolina 27801; Gooding, Herbert W., 1001 West Third Street, Ayden, North Carolina 28513; Gaskins, R. Hogan, Jr., 200 Preston Road, Jacksonville, North Carolina 28540.

II. Study Clubs within the districts

Alamance-Caswell Dental Society. Dr. Nat Garrison, Chairman; Dr. John Stephen; Dr. Joel Walker.

Asheville Dental Society. Dr. Jerry Parsons, Chairman; Dr. Dixon Qualls; Dr. William Mynatt.

Cabarrus County Dental Society. Dr. E. B. Morgan, Sr., Chairman; Dr. Phil Tesh; Dr. Joe V. Davis, Jr.; Dr. Al Stepp.

Catawba County Dental Society. Dr. Jack Adair, Chairman; Dr. Auburn Poovey; Dr. Shuford Abernethy; Dr. James Price; Dr. William McDowell; Dr. D. G. Frye; Dr. Clarence Canrobert; Dr. William Gwynn; Dr. Steve Frye.

Fifth District Dental Society. Dr. June Rose, Chairman.

Forsyth County Dental Society. Dr. William G. Ware, Chair-

man; Dr. William Grant Lynch; Dr. Edmund B. Hopkins; Dr. Charles M. Westrick.

Guildford County Dental Society. Dr. James Beurle, Chairman; Dr. Daniel V. Cregar, Jr.; Dr. J. Baxter Caldwell; Dr. Michael L. Collins.

Salisbury Dental Society. Dr. James C. Eagle, Chairman; Dr. M. Stevenson Thurston; Dr. Robert W. Wilson; Dr. William C. Klein.

Southeastern Dental Society. Dr. Dan Floyd, Chairman; Dr. Ben Ward; Dr. Bryant Wicker.

Wayne County Dental Society. Dr. M. G. Delbridge, Chairman; Dr. H. F. Cofield; Dr. James H. Lee.

Wilmington Dental Society. Dr. J. R. Stike, Chairman; Dr. Larry Neal; Dr. Al Roseman; Dr. Pete Camak.

Henderson County Dental Society. Dr. Corbin Williams, Chairman; Dr. Donald J. Draper; Dr. David Chapman.

Resolutions

This report is informational in nature and no resolutions are submitted.

PUBLIC RELATIONS COMMITTEE

M. LYNWOOD CHERRY, *Chairman*

HARRY N. BALDWIN	WAYNE ANDERSON
COLIN P. OSBORNE, JR.	WILLIAM A. MYNATT

Meetings. This Committee has received no communications; therefore, no meetings have been held.

Resolutions

This report is informational in nature and no resolutions are submitted.

RELIEF COMMITTEE

W. L. HAND, *Chairman*
(1977)

S. L. BOBBITT (1975)	S. E. MOSER (1976)
J. W. HEINZ (1978)	G. R. WILLIS (1974)

Meetings. The Committee met August 8, 1973 to review the Relief Funds and submitted requests.

Recommendations. The Relief Fund Committee recommended that the First Union National Bank be the vehicle for management of the Relief Fund of the North Carolina Dental Society.

An appropriate resolution is presented for consideration by the House of Delegates.

Resolutions

15. Resolved, that the Trustees of the North Carolina Dental Society Relief Fund have under date of March 6, 1974 adopted certain rules and regulations pursuant to Article IV of an Indenture of Trust, executed the 6th day of May, 1966, by and between the North Carolina Dental Society and the members of the Relief Committee of the North Carolina Dental Society, and be it further

Resolved, that Article IV of the said Indenture of Trust requires that the House of Delegates of the North Carolina Dental Society approve the rules and regulations of the Trustees of the North Carolina Dental Society Relief Fund in order that the same shall be effective, and be it further

Resolved, that the rules and regulations of the North Carolina Dental Society Relief Fund as adopted by the Trustees of the said Relief Fund under date of March 6, 1974, a copy of which is appended hereto, be and the same are hereby approved.

RULES AND REGULATIONS

OF THE

NORTH CAROLINA DENTAL SOCIETY RELIEF FUND

The Trustees of the North Carolina Dental Society Relief Fund pursuant to the duty and authority imposed upon them by Article IV of the Indenture of Trust executed May 6, 1966, by

and between the North Carolina Dental Society and the members of the Relief Committee of the North Carolina Dental Society, as amended, adopt the following rules and regulations:

1. The Chairman of the Trustees of the North Carolina Dental Society Relief Fund shall be the then serving Chairman of the Relief Committee of the North Carolina Dental Society.

2. The Trustees may, in their discretion, elect a Vice Chairman of the Trustees of the North Carolina Dental Society Relief Fund to act in the place and stead of the Chairman when so designated by him, or, in the absence or incapacity of the Chairman.

3. The Trustees shall meet from time to time upon call of the Chairman at a time and place designated by him.

4. A majority in number of the Trustees shall constitute a quorum for the conduct of any business at any duly called meeting of the Trustees and, if a quorum is present, action may be taken at such meeting upon the affirmative vote of a majority of the Trustees present at such meeting.

5. Action on any business may be taken by the Trustees between their meetings at the request of the Chairman which action shall require approval by a majority of the Trustees, which approval may be given by any means of communication acceptable to the Chairman of the Trustees.

6. The Trustees may from time to time appoint and compensate a managing agent deemed by them to be competent and financially responsible for the assets of the Relief Fund and may delegate to such managing agent all or any part of the powers granted to the Trustees by law or by the Indenture of Trust hereinabove referred to and as the same may be amended from time to time, and may agree to hold such managing agent free and harmless from liability other than for willful misconduct or gross negligence in the performance or non-performance of the duties and responsibilities delegated to and undertaken by such managing agent.

Duly adopted by the Trustees of the North Carolina Dental Society Relief Fund this March 6, 1974.

WILLIAM L. HAND (Trustee)
GUY R. WILLIS (Trustee)
S. L. BOBBITT (Trustee)
J. WILLIAM HEINZ (Trustee)
S. E. MOSER (Trustee)

Resolutions

SUBMITTED BY THE EXECUTIVE COMMITTEE AND DELEGATES

EXECUTIVE COMMITTEE

At its meeting January 5, 1974 the Executive Committee voted to submit the following resolution to the House of Delegates:

Resolution

Whereas; Ms. Daughtry, serving for many years as Director of

Report of Delegation to A.D.A.

RALPH D. COFFEY, *Chairman*
(1974)

PEARCE ROBERTS, JR., *Vice-Chairman*
(1975)

M. W. ALDRIDGE JAMES A. HARRELL
(1975) (1974)

EDWARD U. AUSTIN JOSEPH M. JOHNSON
(1974) (1976)

Roy L. LINDAHL
(1975)

The North Carolina Delegation to the American Dental Association met on Sunday, October 14, 1973, at 9:00 a.m. at the Hilton Inn, Atlanta, Georgia, with the entire Fifth Trustee Dele-

gation. A trustee report was given by Dr. John M. Faust, Fifth Trustee District. Reports were given by selected delegates from the Fifth Trustee District on the ADA Council Reports and Resolutions. Dr. Henry Aldridge, North Carolina Delegation, presented the report on Dental Laboratory Relations, Dental Materials and Dental Research. The North Carolina resolution dealing with visual aids in continuing education was submitted and adopted for presentation by the Fifth Trustee District Delegation. Dr. Edward U. Austin, North Carolina Delegation, served as Chairman of the Fifth Trustee District Delegation in Atlanta and Houston.

The North Carolina Delegation next met in caucus Saturday, October 27, 1973, at 7:30 a.m. in the Hospitality Suite of the North Carolina Dental Society in the Hyatt Regency Hotel,

Health Occupations in the North Carolina Department of Community Colleges, has made outstanding contributions to the development of dental auxiliary education in the State of North Carolina, and

Whereas; she has worked diligently to maintain high quality in dental auxiliary education in North Carolina, and

Whereas; the dental health and well being of North Carolinians throughout our State have benefited from her vision and dedicated efforts, and

Whereas; the dental profession is deeply appreciative of her work in behalf of dental health and dental health education,

12. Resolved, that the North Carolina Dental Society extends its sincere gratitude and recognition for her guidance and innovative approaches to auxiliary education to Ms. Miriam Daughtry upon the occasion of her retirement.

By mail ballot on March 4, 1974 the Executive Committee voted to submit the following resolutions on honorary membership in the North Carolina Dental Society to the House of Delegates.

13. Resolved, that Lynden M. Kennedy, D.D.S., President-Elect, American Dental Association, be elected to honorary membership in the North Carolina Dental Society.

14. Resolved, that Roger Hombs, Major General, USAF, D.D.S., Assistant Surgeon General for Dental Services be elected to honorary membership in the North Carolina Dental Society.

RESOLUTION

Edward U. Austin
Delegate

Background Information: On a national level the law establishing Professional Standard Review Organizations (PSRO) does not include a dental representative on the policy board. Under the law the state P.S.R.O. Board is appointed by the Governor with certain specification as to representation. Again there is no recommendation that a dental representative be appointed. However, it is possible for the Governor to appoint a dentist to this Commission as a so called "public member." Realizing the role of dentistry in the over all health care picture to the people of our state and nation and the total impact of P.S.R.O. to the professions, our Society has requested a dentist be appointed to this Board. To support this request as strongly as possible and to alert our membership to the importance, necessity and urgency of this request the following resolution is presented.

19. Resolved, that the House of Delegates of the North Carolina Dental Society respectively request the Governor of North Carolina to give utmost consideration to the Society's request to appoint a knowledgeable dentist to this commission and be it further

Resolved, that the Executive Committee of the North Carolina Dental Society use every means possible to inform and urge the membership to seek representation on all local level Professional Standard Review Organizations.

Houston, Texas. All delegates were present. The delegation studied the resolutions to be considered by the House of Delegates. Dr. L. M. Kennedy and Dr. Robert L. Morrison, candidates for president-elect of the ADA, each appeared before the North Carolina Delegation for a question and answer period.

Sunday morning, October 28, we met in caucus with the Fifth Trustee District Organization. Dr. E. U. Austin was again elected Chairman of the Fifth Trustee District Organization.

The first session of the House of Delegates began at 2:00 p.m. Sunday, October 28. All delegates were present at this session.

Reference Committee hearings were held Monday, October 29. Members of the North Carolina Delegation were assigned to

attend each of the committee hearings.

The North Carolina Delegation met in an all afternoon caucus with the Fifth Trustee District Organization Tuesday, October 30. Reference Committee decisions were discussed.

The House of Delegate's second and third sessions lasted the entire day on Wednesday and until the early afternoon on Thursday. I shall not report to you on the many actions taken by the House and the election of officers as this has been received long ago by all members.

Due to my wife's illness on October 30, Dr. Pearce Roberts, Jr., Vice-Chairman, took over as Chairman of the Delegation and Dr. J. Harry Spillman moved up from alternate delegate to delegate.

Actions of House of Delegates

North Carolina Dental Society

118th Annual Session

March 29-30, 1974

ADOPTED:

1-1974-H. Resolved, that the agenda on pages iii and iv (yellow sheets) be adopted as the official order of business for this session of the House of Delegates.

2-1974-H. Resolved, that the list of referrals submitted by the Speaker of the House of Delegates be approved.

3-1974-H. Resolved, that the report of the Committee on Rules and Order be adopted, and be it further

Resolved, that the report of the Committee on Rules and Order constitute the rules for the proper conduct of business at this session of the House of Delegates.

4-1974-H. Resolved, that the North Carolina Dental Society extends its sincere gratitude and recognition for her guidance and innovative approaches to auxiliary education to Ms. Miriam Daughtry upon the occasion of her retirement.

5-1974-H. Resolved, that Lynden M. Kennedy, D.D.S., President-Elect, American Dental Association, be elected to honorary membership in the North Carolina Dental Society.

6-1974-H. Resolved, that Roger Hombs, Major General, USAF, D.D.S., Assistant Surgeon General for Dental Services be elected to honorary membership in the North Carolina Dental Society.

REJECTED:

7-1974-H. Resolved, that the North Carolina Dental Society endorse the additions to and changes in the Dental Practice Act of North Carolina submitted by the Dental Practice Act Committee and the University of North Carolina Administration to allow: (1) all appropriate dental research in or out of the dental school, (2) the expanded duty research in the private office to be completed, (3) all extramural programs for dental students by the UNC School of Dentistry and (4) hygienists employed by the Dental Health Division, Department of Human Resources to screen pupils, apply fluoride to their teeth and perform prophylaxis for indigent children.

ADOPTED AS AMENDED:

8-1974-H. Resolved, that the 1974 House of Delegates approves the proposed amendments to the Dental Practice Act to be numbered G.S. 90-233(c) 5 and G.S. 90-29(c) 12 with the following changes:

(a) After "dental assistant," paragraph one, delete "or any other person"

(b) After "University of North Carolina" in paragraph one, delete "or of any other governmental body or agency of the State of North Carolina or its political subdivisions."

(c) In paragraph one after "within" insert the number "60," and be it further

Resolved, that all expedient methods possible be used to introduce these amendments into the North Carolina State Legislature with recommendation for passage and that if such legisla-

tion is not enacted at the current session of the legislature that it be introduced at the next session of the legislature with recommendation for passage.

REJECTED:

9-1974-H. Resolved, that the North Carolina Dental Society endorses the following proposed change to G.S. 90-29 (c) and requests the Legislative Committee to work for its immediate passage:

G.S. 90-29 (c) (4) The practice of dentistry in dental schools or colleges in this State approved by the North Carolina State Board of Dental Examiners by students enrolled in such schools or colleges when such practice is performed as a part of their course of instruction and is under the supervision of a dentist who is either duly licensed in North Carolina or qualified under subdivision (3) above as a teacher. Additionally, the practice of dentistry by such students at any location **other than a private dental office** subject to review and approval by the said Board of Dental Examiners within 60 days. When in the opinion of the Dean of such dental school or college or his designee the student's dental education and experience **are** adequate and such practice is a part of the course of instruction of such students, is performed under the supervision of a duly licensed dentist acting as a teacher or instructor, and is without remuneration except for expenses and subsistence as defined and permitted by the Rules and Regulations of said Board of Dental Examiners.

ADOPTED:

10-1974-H. Resolved, that the North Carolina Dental Society endorses the enactment of changes in the Dental Practice Act which will permit the expansion of educational opportunities for students of dentistry and be it further

Resolved, that the Executive Committee in consultation with the School of Dentistry and the N. C. State Board of Dental Examiners be instructed to seek said remedial legislation in 90-29(c) 4 during the 1975 legislative session consistent with the following basic provisions:

Rewrite G.S. 90-29(c) (4) to read as follows (omitted matter being stricken through, and new matter being underlined, thus):

"(4) The practice of dentistry in dental schools or colleges in this State approved by the North Carolina State Board of Dental Examiners by students enrolled in such schools or colleges when such practice is performed as a part of their course of instruction and is under the supervision of a dentist who is either duly licensed in North Carolina or qualified under subdivision (3) above as a teacher; additionally, the practice of dentistry by such students at any location **other than a private dental practice** subject to review and approval **or disapproval** by the said Board of Dental Examiners when in the opinion of the Dean of such dental school or college or his designee the student's dental education and experience **are** adequate therefor, and such practice is a part of the course of instruction of such students,

performed under the supervision of a duly licensed dentist acting as a teacher or instructor, and is without remuneration except for expenses and subsistence all as defined and permitted by the Rules and Regulations of said Board of Dental Examiners. Should the Board disapprove a specific program, the Board shall within 60 days inform the dean of its actions together with specific and detailed reasons for such disapproval or revocation of a prior approval.

ADOPTED:

11-1974-H. Resolved, that the President of the North Carolina Dental Society immediately appoint a 5 member committee, one member from each district, to: (a) collect all research data from all sources pertaining to expansion of auxiliary duties (b) study and propose ways our auxiliary duties should be expanded in North Carolina (c) study and propose ways of educating our present auxiliaries to these expanded duties.

12-1974-H. Resolved, that Dr. James A. Harrell, President of the North Carolina Dental Society, be barred from adjusting any thermostat during any of the official meetings of the North Carolina Dental Society.

13-1974-H. Resolved, that the North Carolina Dental Society House of Delegates, because of the very fine job of training dental manpower accomplished by the various schools across the State, and because of their interest in the professions' activities so closely aligned with their efforts, hereby urge each District President to invite the various schools in their area teaching Dental Auxiliary education to present a scientific exhibit of their choosing at the Annual District Meetings.

14-1974-H. Resolved, that the North Carolina Dental Society House of Delegates go on record commending Dr. R. B. Barden for his outstanding dedication and unselfish efforts as Chairman of the Dental Education Committee, and be it further.

Resolved, that the North Carolina Dental Society House of Delegates commend Dr. Barden for his thoroughness and completeness of this committee report.

15-1974-H. Resolved, that the North Carolina Dental Society request all local dental societies to have a Professional Relations Committee and that a complete listing of all of these Professional Relations Committees be compiled by the Executive Secretary of the North Carolina Dental Society and kept in the Central Office and be it further.

Resolved, that any complaints coming into the Central Office be referred to the appropriate local Professional Relations Committee for action and be it further.

Resolved, that matters not resolved at the most local level be referred to the District level Professional Relations Committee.

ADOPTED AS AMENDED:

16-1974-H. Resolved, that the present Subcommittee on Dental Hygienists of the Dental Education Committee be absolved, and be it further.

Resolved, that a new committee shall be created for the express purpose of liaison between hygienists and dentists and that it be named the Committee on Liaison—NCDS—NCDHA, and be it further.

Resolved, that the general purpose of the new committee will be:

1. To establish better rapport between the North Carolina Dental Society and the North Carolina Dental Hygienists Association.
2. To assimilate and disseminate information pertinent to both organizations, and
3. To take any direction the President of the North Carolina Dental Society may specify.

ADOPTED:

17-1974-H. Resolved, that the North Carolina Dental Society House of Delegates reaffirm its support of the Continuing Dental Education Council of North Carolina by approving the attached Bylaws of the Council.

18-1974-H. Resolved, that the Trustees of the North Carolina Dental Society Relief Fund have under date of March 6, 1974,

adopted certain rules and regulations pursuant to Article IV of an Indenture of Trust, executed the 6th day of May, 1966, by and between the North Carolina Dental Society and the members of the Relief Committee of the North Carolina Dental Society, and be it further.

Resolved, that Article IV of the said Indenture of Trust requires that the House of Delegates of the North Carolina Dental Society approve the rules and regulations of the Trustees of the North Carolina Dental Society Relief Fund in order that the same shall be effective, and be it further.

Resolved, that the rules and regulations of the North Carolina Dental Society Relief Fund as adopted by the Trustees of the said Relief Fund under date of March 6, 1974, a copy of which is appended hereto, be and the same are hereby approved.

19-1974-H. Resolved, that it be made a matter of record that the following were dropped from the roll on December 31, 1973, for non-payment of dues in accordance with Article VI, Section 6 of the Bylaws:

First District: John D. Matheson, Virginia Beach, Virginia; John J. Schneider, Asheville.

Second District: Lacy H. Caple, Lexington; James B. Zuccarello, Charlotte; George T. Nash, Charlotte.

Third District: Harrison C. Walker, Jr., Birmingham, Alabama.

Fourth District: None

Fifth District: Joseph S. Bennett, Greenville, Mississippi; Johnnie D. Hodges, Jr., Wilmington.

ADOPTED:

20-1974-H. Resolved, that Mr. Robert L. Cherry, Mrs. Jean G. Pace and Mrs. Faye K. Marley, the administrative staff of the Central Office, be commended for their dedicated and efficient efforts in fulfilling the duties for the membership of the North Carolina Dental Society.

21-1974-H. Resolved, that Dr. Robert J. Shankle, Editor of the NORTH CAROLINA DENTAL JOURNAL, be commended for his superb editorship and outstanding journalism in connection with the NORTH CAROLINA DENTAL JOURNAL as evidenced by the national recognition received by the journal.

22-1974-H. Resolved, that the North Carolina Dental Society formally declare a sincere interest in the health care of institutionalized persons in the state and that the Dental Health Committee constantly strive to promote better programs for these people.

23-1974-H. Resolved, that the House of Delegates direct the Dental Health Committee to continue to investigate and evaluate dental care provided in various state institutions with the assistance of the District Societies.

REJECTED:

24-1974-H. Resolved, that a committee be appointed or a present committee be given the responsibility of reviewing the various laws that govern our relationship with various state and federal agencies codifying them and publishing them for the various members of our Society.

ADOPTED:

25-1974-H. Resolved, that Dental Care Programs Committee be given the responsibility of reviewing the various laws that govern our relationship with various state and federal agencies and publish a resume for members of the Society.

ADOPTED AS AMENDED:

26-1974-H. Resolved, that the North Carolina Dental Society pursue all avenues possible to raise the payment of fees under Title XIX programs to 100 per cent of the usual and customary fees at the 75th percentile with the N. C. Department of Human Resources, N. C. Department of Social Services and the N. C. General Assembly.

ADOPTED:

27-1974-H. Resolved, that the North Carolina Dental Society

express sincere gratitude to Dr. E. Jefferson Burkes and Dr. William Quarles for efforts associated with the Subcommittee on Cancer and especially for their work in the Oral Cancer Detection Clinic held at the N. C. State Fair.

REJECTED:

28-1974-H. Resolved, that dental laboratory operators and/or owners and dental laboratory technicians be required to register and re-register annually on or before January first with the North Carolina State Board of Dental Examiners. The registration fee for dental laboratory operators and/or owners shall be set by the House of Delegates. (Suggested fee range \$10-\$100). The registration fee for dental laboratory technicians shall be set by the House of Delegates. (Suggested fee range \$5-\$25). Employees of dental laboratories who are not technicians would not be required to register, but a list of those employees would have to be furnished annually to the North Carolina State Board of Dental Examiners by the laboratory operators, and be it further.

Resolved, that failure to comply with this registration shall be deemed to be a misdemeanor punishable by a fine or imprisonment or both.

ADOPTED AS AMENDED:

29-1974-H. Resolved, that registration of Dental Laboratories and Laboratory Technicians be referred to the Dental Laboratory Relations Committee for further study and consideration and that this committee submit specific recommendations on registration to the 1975 House of Delegates after consultation with the N. C. State Board of Dental Examiners.

ADOPTED:

30-1974-H. Resolved, that the House of Delegates of the North Carolina Dental Society respectfully request the Governor of North Carolina to give utmost consideration to the Society's request to appoint a knowledgeable dentist to this commission and be it further.

Resolved, that the Executive Committee on the North Carolina Dental Society use every means possible to inform and urge the membership to seek representation on all local level Professional Standard Review Organizations.

31-1974-H. Resolved, that the Specialty Licensure Bill submitted to the North Carolina State Legislature be withdrawn and tabled indefinitely.

32-1974-H. Resolved, that the present Subcommittee on Dental Assistants of the Dental Education Committee be discontinued and be it further.

Resolved, that a new committee shall be created for the express purpose of liaison between dental assistants and dentists and that it be named the Committee on Liaison—NCDS—NCDA, and be it further.

Resolved, that the general purpose of the new committee will be to promote better liaison between the members of the

North Carolina Dental Society and the N. C. Dental Assistants Association and provide a means of better communications between the two organizations.

33-1974-II. Resolved, that the North Carolina Dental Society consider making a detailed dental manpower study in North Carolina.

34-1974-H. Resolved, that Article VIII of the *Bylaws* have an additional section added which will become section 3 as follows. When a member of the Society is representing the Society at meetings, and social occasions are part of the meetings, spouses are expected to attend. By their presence, the image of the Society is enhanced; therefore, it is urged that Society members have their spouses accompany them.

REJECTED:

35-1974-H. Resolved, that resolution 18-1973-H. be postponed indefinitely.

ADOPTED:

36-1974-H. Resolved, that Section 6 of Article I of the *Bylaws* be deleted and the following substituted therefor:

Section 6. In the event the office of President becomes vacant, the President-Elect shall become President for the unexpired portion of the term, after which he shall serve a full term as President. In the event both the offices of President and President-Elect become vacant, the vice president shall become President for the unexpired portion of the term. In the event the office of President-Elect becomes vacant, the President for the ensuing year shall be elected at the next annual session of the Society in accordance with Chapter IV of the *Bylaws*. A vacancy in the office of Vice President or in the office of Secretary-Treasurer shall be filled for the unexpired portion of the term by a majority vote of the Executive Committee.

ADOPTED AS AMENDED:

37-1974-H. Resolved, that Article IV of the *Bylaws*, present Section 2 be renumbered Section 3 and present Section 3 be renumbered Section 4, with the following becoming a new Section 2:

Every new member of the North Carolina Dental Society (excluding student members), in order to maintain his membership, is required to attend separate orientation and charge sessions at the next annual meeting of his district dental society following his election to membership (service time excluded), and that failure to comply with this requirement will result in a review of his membership status by the Executive Committee. The prospective new member will be notified of this requirement by placing the following statement on all future applications: I understand that should I be elected to membership in my local district dental society and the North Carolina Dental Society, my continuing membership is subject to my attendance at separate orientation and charge sessions at the next annual session of my district dental society.

General Sessions

FIRST GENERAL SESSION

Sunday, May 12, 1974

Call to Order: The first general session of the 118th Annual Session of the North Carolina Dental Society was called to order by President James A. Harrell at 8:40 p.m., Sunday, May 12, 1974, in the Cardinal Ballroom of the Pinehurst Hotel, Pinehurst, North Carolina.

Invocation and Memorial Service: Dr. Robert J. Shankle gave the invocation and memorial service for those members who had died since the last Annual Session.

Introduction of Officers and Guests: President Harrell introduced the Society officers, ADA officials, special guests and presidents of allied organizations in attendance.

President's Report: President Harrell presented his report to the Society.

Dental Foundation Presentation and Report: Mrs. Robert W. Moye presented a check for \$10,262.69 to Dr. Thomas G. Nisbet, President, Dental Foundation of North Carolina, from the 1974 Scrap Amalgam Drive. Dr. Nisbet accepted the check and reported on the Dental Foundation.

Report of Fifth District Trustee: Dr. John M. Faust of Hattiesburg, Mississippi, Trustee, Fifth District, American Dental Association, presented his report to the Society.

Address by President-Elect, ADA: Dr. Lynden M. Kennedy of Dallas, Texas, President-Elect, American Dental Association, addressed Society members and guests.

Honorary Membership: President Harrell presented a certifi-

cate of honorary membership in the Society to Dr. Lynden M. Kennedy.

Nomination of Officers: President Harrell called for nominations for Society officers for 1974-75.

Dr. J. Harry Spillman of Winston-Salem was nominated for the office of President-Elect by Dr. G. S. Abernethy of Hickory.

Dr. Harold E. Maxwell of Fayetteville was nominated for the office of President-Elect by Dr. Mitchell W. Wallace of Spring Lake.

Dr. Baxter B. Sapp, Jr. of Durham was nominated for the office of Vice President by Dr. Norman F. Ross of Durham.

Dr. R. B. Barden of Wilmington was nominated for the office of Secretary-Treasurer by Dr. James A. Privette of Kinston.

Dr. Ralph D. Coffey of Morganton was nominated as a delegate to the American Dental Association by Dr. Francis A. Buchanan of Hendersonville.

Dr. Edward U. Austin of Charlotte was nominated as a delegate to the American Dental Association by Dr. Paul A. Stroup, Jr. of Charlotte.

Announcements: Dr. Baxter B. Sapp, Program Committee Chairman, described the Scientific Programs to be presented.

Mr. Robert L. Cherry, Executive Secretary, announced registration as of five o'clock was 718, including 359 members.

Adjournment: The meeting was adjourned at 10:15 p.m.

SECOND GENERAL SESSION

Monday, May 13, 1974

Call to Order: The Second General Session of the 118th Annual Session of the North Carolina Dental Society was called to order by President James A. Harrell at 8:41 p.m., Monday, May 13, 1974, in the Cardinal Ballroom of the Pinehurst Hotel in Pinehurst, North Carolina. Dr. Charles W. Horton led in prayer.

Address by Major General Roger Hombs: Major General Roger Hombs, Assistant Surgeon General for Dental Services, U. S. Air Force, addressed the Society members and guests.

Honorary Membership: President Harrell presented a certificate of honorary membership to Major General Roger Hombs.

Report of Board of Dental Examiners: Dr. Cecil A. Pless, Jr. of Asheville, President, N. C. State Board of Dental Examiners, reported on Board activities during the past year.

N. C. Sports Medicine Division: Dr. J. Allen Proctor, Director, N. C. Sports Medicine Division, N. C. Department of

Public Instruction, spoke to Society members soliciting support for local dentists to aid the School Sports Medicine Program.

UNC School of Dentistry Report: Dr. James W. Bawden, Dean, University of North Carolina School of Dentistry, reported on the programs of the school.

Election of Officers: President Harrell announced the appointment of the tellers: Dr. D. F. Hord, Dr. Walter S. Linville and Dr. William G. Ware.

President Harrell called for further nominations.

There being no further nominations, the following were declared elected by acclamation:

Vice President: Baxter B. Sapp

Secretary-Treasurer: R. B. Barden

ADA Delegates: Ralph D. Coffey and E. U. Austin

A secret ballot vote elected Harold E. Maxwell as President-Elect.

1976 Annual Session: Dr. Darden J. Eure, Jr. moved that the Society hold its 1976 Annual Session in Pinehurst. The motion was seconded and carried.

Registration: The Executive Secretary announced that registration at 5:00 p.m. totaled 1712, including 777 members.

Adjournment: The meeting was adjourned at 10:53 p.m.

THIRD GENERAL SESSION

Wednesday, May 15, 1974

Call to Order: The Third General Session of the 118th Annual Session of the North Carolina Dental Society was called to order by President James A. Harrell at 11:30 a.m., Wednesday, May 15, 1974, in the Cardinal Ballroom of the Pinehurst Hotel, Pinehurst, North Carolina. Dr. J. Harry Spillman led in prayer.

Installation of Officers: President Harrell installed Dr. Charles W. Horton as President for 1974-75.

Dr. Horton then installed the newly elected officers and ADA Delegates as follows: Harold E. Maxwell, President-Elect; Baxter B. Sapp, Vice President; R. B. Barden, Secretary-Treasurer; Ralph D. Coffey and Edward U. Austin, Delegates to the American Dental Association.

Presidential Appointments: President Horton announced the following appointments: Robert B. Litton, Chairman of the Executive Committee and J. Harry Spillman, member of the Executive Committee.

Adjournment: The meeting adjourned sine die at 11:46 a.m.

Committee Appointments 1974-75

STANDING COMMITTEES

ANNUAL SESSION: Keith L. Bentley, chairman; Robert M. Barham, Jon W. Couch, Richard M. Fields, James A. Harrell, Deane Hundley, III, W. Harrell Johnson, Robert M. Kriegsman, L. P. Megginson, Jr., Walter S. Morris, Jr., Julian R. Rogers, Joseph R. Suggs, Phillip W. Thomas, R. Bruce Warlick, Donald L. Westbrook.

Subcommittees

Arrangements: Jon W. Couch, chairman; Richard P. Belton, G. A. Haltiwanger, Edward M. Miller, Charles Surles, Jr.

Projected Clinics: Robert M. Kriegsman, chairman; Richard Belton, Victor L. Andrews, James D. Kaley, John Povlich, J. R. Mooring, L. H. Hutchens, Jr., Worth B. Gregory.

Table Clinics: Joseph R. Suggs, chairman.

Commercial Exhibits: Phillip W. Thomas, chairman; Larry E. Baucom, Morris Hal Griffin, Charles M. Kistler.

Entertainment: W. Harrell Johnson and R. Bruce Warlick, Entertainment and Dance; James A. Harrell, Banquet.

Monitor: Robert M. Barham, chairman; Ronald R. Beshears, John K. Campbell, Richard A. Croxton, Leslie O. Fowler, Rawley H. Fuller, Edwin B. Garrison, Lewis R. Goodwin, Harry W. Killian, Lynn B. McNeely, James T. Mitchell, R. By-

ron Moore, Warren T. Portwood, Paul L. Powell, Phillip L. Savage, Ronald W. Stone, George E. Sutton, Richard B. Todd, Tommy D. Upchurch.

Auxiliary: Richard M. Fields, chairman.

Program: Julian R. Rogers, chairman; James D. Blankenbeckler, Joseph E. Campbell, Dixon L. Qualls, Jeremiah N. Partrick, Junius H. Rose, Jr., William D. Strickland.

Public Relations: L. P. Megginson, Jr.

Scientific Exhibits: Don L. Westbrook, chairman, Charles D. Allen, Karl F. Leinfelder, Aldridge D. Wilder.

Sports: Walter S. Morris, Jr., Deane Hundley, III, co-chairmen; Charles J. Harris, Jr., George M. Wallace.

CONSTITUTION AND BYLAWS: William G. Schneider, chairman (77); W. David Burns (79); G. Shuford Abernethy (78); Charles P. Godwin (76); Thomas G. Nisbet (75).

DENTAL CARE PROGRAMS: Walter S. Linville, Jr., chairman (77); George G. Dudley (75); Richard H. Graham (78); Samuel T. Hart (76); William H. Hoffler, Jr. (79).

Subcommittees

State Agencies: William E. Kidd, chairman; James H. Edwards, Numa C. Johnson, C. B. Ledbetter, Fred N. Ogden, II, William F. McBrayer.

State Peer Review: James H. Lee, chairman (75); C. M. Kistler (76); Lewis W. Lee (75); William H. Price (76); Kenneth M. Ray (77); W. Kenneth Young (77).

Industrial Commission: D. W. Seifert, chairman; M. W. Carpenter, John F. Povlich, James A. Privette, Robert W. Sugg, Frank H. Walker.

DENTAL EDUCATION: Mitchell Wallace, chairman; Shuford Abernethy, Mett B. Ausley, Leonard Cashion, Darden Eure, Jr., Ben H. Houston, Walter S. O'Berry, Robert H. Owen, Jr., Auburn L. Pooley, Galen Quinn, Kenneth M. Ray, Robert W. Roberson, Riley E. Spoon, Jr., John A. Stephens, Sanford W. Thompson, III, Harold W. Twisdale.

Subcommittees

Continuing Education: J. Harry Spillman, chairman; Jon W. Couch, Roy L. Lindahl, consultant; Cecil A. Pless, Jr., William H. Price, J. Fred Sproul, Gene Rauch, N.C.D.H.A. President; Betty Scott, N.C.D.A.A. President; Chris Shields, N.C.D.H.A. Secretary; Naomi Lutz, N.C.D.A.A. Secretary.

COMMITTEE ON LIAISON N.C.D.S.-N.C.D.H.A.: William D. Strickland, chairman; Roger Barton, consultant; Tom S. Fleming, Robert M. Fox, D. F. Hord, James T. Mitchell, N. C. Dental Assistants Representatives, Naomi Lutz, Linda Heffinger, Ethel Earl, Aileen Croom, Sue Slaughter, Betty Scott.

COMMITTEE ON LIAISON N.C.D.S.-N.C.D.H.A.: Joseph M. Johnson, chairman; Victor L. Andrews, Jr., Max W. Carpenter, Vonnie B. Smith, Don W. Warren, James M. Zealy, North Carolina Dental Hygienists Association Representatives.

DENTAL HEALTH: Zeno L. Edwards, Jr., chairman; A. Breece Breland, Claude W. Drake, Jack A. Menius, E. A. Pearson, Alton L. Smith, Robert B. Taylor, Ralph A. Young.

Subcommittees

Dental Health for Institutionalized People: Claude W. Drake, chairman; Nicholas J. Bartis, Franklin E. Martin, Freeman C. Slaughter, Ralph A. Young.

Cancer: E. Jefferson Burkes, chairman; Dan M. Averett, William L. Barham, John W. Barts, Jr., Fred A. Bell, James G. Beurle, Donald D. Culp, Stuart B. Fountain, Clifford B. Jones, Jr., William A. Mynatt, Vonnie B. Smith, Scott C. Tolbert, Stanley E. Holt.

DENTAL LABORATORY RELATIONS: Victor Andrews, Jr., chairman; James A. Privette (76); Daniel U. Cregar (79); Robert A. George (77); D. F. Hord (78).

ETHICS: William A. Current, chairman (79); Robert H. Gainey (77); James A. Privette (75), John A. S. Reynolds (76); Baxter B. Sapp, Jr. (78).

FEDERAL DENTAL SERVICES: R. Hogan Gaskins, chairman; R. A. Carnevale, Fred G. Hasty, James H. Lee, J. Harry Spillman.

HOSPITAL DENTAL SERVICE: James G. Beurle, chairman; W. Robert Caviness, R. Donald Coffey, William P. Hinson, Glenn A. Lazenby, Theodore R. Oldenberg, W. Joe Porter, Marten W. Quadland, Walter R. Secosky, Freeman C. Slaughter.

INSURANCE: J. S. D. Nelson, chairman (78); Thomas L. Blair (75); Donald E. Bland (77); Francis A. Buchanan (79); John S. Dilday (76).

LEGISLATIVE: Richard H. Graham, chairman; Charles T. Barker, Moti P. Blair, Francis A. Buchanan, Jon W. Couch, Darden Eure, Jr., J. B. Freedland, Harold E. Maxwell, Robert H. Watson.

LONG RANGE PLANNING: C. W. Poindexter, chairman (79); Gerald M. Cathey, consultant; A. C. Current, Jr. (75); Darden Eure, Jr. (78); J. B. Freedland, Jr. (76); J. Harry Spillman (77).

MEMBERSHIP: Vice President, N. C. Dental Society and five District Vice Presidents.

PREVENTIVE DENTISTRY: Carle W. Mason, Jr., chairman; M. W. Aldridge, Claude W. Drake, Frederick B. Lopp, Wayne Ridout, William R. Spencer, J. Fred Sproul, R. Bruce Warlick, Ralph A. Young.

PROFESSIONAL RELATIONS: Sam H. Isenhower, chairman; David H. Freshwater, Galen W. Quinn, Joe B. Roberson, Mitchell W. Wallace, William G. Ware, Jr., and all district chairmen of Professional Relations Committees (Grievances).

PUBLIC RELATIONS: L. P. Megginson, Jr., chairman; Wayne Anderson, Michael E. Bost, Jon W. Couch, P. W. Jessup, Carey T. Wells, Jr.

RELIEF: William L. Hand, Jr., chairman (77); S. L. Bobbitt (75); J. William Heinz (78), S. E. Moser (76); Charles H. Sugg (79).

SPECIAL COMMITTEES

CENTRAL OFFICE AND FINANCE: R. B. Barden; James A. Harrell, Frederick G. Hasty.

NCD-PAC: Harold E. Maxwell, chairman; Thomas B. Reid, Jr., Vice Chairman; R. Donald Coffey, Secretary; Julius R. Cooley, Treasurer; Francis A. Buchanan, William P. Hinson, Jr., William E. Kidd, Rodger H. Lofland, William G. Quarles, Joseph R. Suggs, Jerry F. Wood.

CHILDREN'S DENTAL HEALTH WEEK: President-Elect, N. C. Society of Dentistry for Children, Burton A. Horwitz.

DENTAL PRACTICE ACT: Julian R. Rogers, chairman; James A. Privette, Charles A. Reap, Jr.

EDITOR, N. C. DENTAL JOURNAL: Robert J. Shankle

ASSISTANT EDITOR: James A. Harrell, Jr.

COMMITTEE TO STUDY EXPANSION OF AUXILIARY DUTIES: D. F. Hord, chairman; William H. Price, James B. Lyon, Mitchell W. Wallace, H. Wayne Ridout.

Officers 1974-75 Allied Organizations

NORTH CAROLINA DENTAL ASSISTANTS ASSOCIATION

President: Betty Scott, 1207 K. Green Oak Lane.....	Charlotte 28205
President-Elect: Barbara Talbert, Route 1, Box 230B.....	Chapel Hill 27514
Vice President: Cheryl Kearny, P. O. Box 53.....	Williamston 27892
Secretary: Naomi Lutz, Route 2, Box 94.....	Newton 28658
Treasurer: Kathy Pagoota, 280 L. Athens Place.....	Charlotte 28205
Past President: Linda Heffinger, 1104 Trogden Drive.....	Eden 27288

NORTH CAROLINA DENTAL AUXILIARY

President: Mrs. Richard M. Fields, P. O. Box 277.....	Pleasant Garden 27313
President-Elect: Mrs. F. D. Pattishall, 2300 Queens Rd. East.....	Charlotte 28207
Vice President: Mrs. Mitchell W. Wallace, 2842 Skye Drive.....	Fayetteville 28303
Corresponding Secretary: Mrs. Charles Langdon, 4007 Belvoir Dr.....	Greensboro 27406
Recording Secretary: Mrs. Keith Bentley, Rt. 3, Box 501.....	Wilkesboro 28697
Treasurer: Mrs. John F. Povlich, III, 206 Crestview Road.....	Raleigh 27609

Historian: Mrs. Bobby G. Wooten, Mountain View Road,
Knob View Place..... Winston-Salem 27104
Parliamentarian: Mrs. T. Hicks Hamrick,
Box 248 Henrietta 28076

**NORTH CAROLINA DENTAL LABORATORY
ASSOCIATION**

President: James F. Horton, 205 N. Pine St..... Wilson 27893
Vice President: John Kubach..... Waxhaw 28173
Secretary-Treasurer: Q. P. Anderson,
Box 438-A..... Hendersonville 28739

**NORTH CAROLINA DENTAL HYGIENISTS
ASSOCIATION**

President: Gene Rauch, P. O. Box 147..... Mocksville 27028
President-Elect: Laura Jeanes,
4401 Montebello Drive..... Charlotte 28211
Vice President: Joanne Wilson,
241 Flintshire Road..... Winston-Salem 27104
Corresponding Secretary: Connie W. Andrews,
915 Ridgeview Dr..... Mocksville 27028
Recording Secretary: Sherry M. Shields,
13 Waters Road..... Asheville 28805
Treasurer: Jean Shulman,
1911 Independence Road..... Greensboro 27408

**NORTH CAROLINA STATE BOARD OF DENTAL
EXAMINERS**

President: Robert W. Sugg (1977).
209 Gregson Street..... Durham 27701
Secretary: Freeman C. Slaughter (1975).
201 Prof. Bldg..... Kannapolis 28081
Cecil A. Pless, Jr. (1976).
Suite 120 Doctors Drive..... Asheville 28801
Henry Lineberger (1975), 3133 Essex Circle..... Raleigh 27608
Benjamin R. Baker (1976),
2101 N. Heritage Street..... Kinston 28501
Colin P. Osborne, Jr. (1977), Drawer 1344... Lumberton 28358

Presidents of the North Carolina Dental Society Since Its Organization

1856.....	*W. F. Bason	1906-07.....	*J. R. Osborne	1940-41.....	*C. M. Parks
1857.....	*E. H. Andrews	1907-08.....	*D. L. James	1941-42.....	C. C. Poindexter
1858.....	*B. F. Arrington	1908-09.....	*F. L. Hunt	1942-43.....	*Paul Fitzgerald
1866.....	*B. F. Arrington	1909-10.....	*J. C. Watkins	1943-44.....	*Clyde E. Minges
1875-76.....	*B. F. Arrington	1910-11.....	*A. H. Fleming	1944-45.....	O. C. Barker
1876-77.....	*V. E. Turner	1911-12.....	*P. E. Horton	1946-47.....	E. M. Medlin
1877-78.....	*J. W. Hunter	1912-13.....	*R. G. Sherrill	1947-48.....	*R. M. Olive
1878-79.....	*E. L. Hunter	1913-14.....	*C. F. Smithson	1948-49.....	C. W. Sanders
1879-80.....	*D. E. Everitt	1914-15.....	*J. A. Sinclair	1949-50.....	Walter T. McFall
1880-81.....	*Isaiah Simpson	1915-16.....	*I. H. Davis	1950-51.....	A. S. Bumgardner
1881-82.....	*M. A. Bland	1916-17.....	*R. O. Apple	1951-52.....	*R. Fred Hunt
1882-83.....	*J. R. Griffith	1917-18.....	*R. M. Squires	1952-53.....	*A. C. Current
1883-84.....	*W. H. Hoffman	1918-19.....	*J. N. Johnson	1953-54.....	Neal Sheffield
1884-85.....	*J. H. Durham	1919-20.....	*W. T. Martin	1954-55.....	*B. N. Walker
1885-86.....	*J. E. Matthews	1920-21.....	*J. H. Judd	1955-56.....	*J. W. Brandom
1886-87.....	*B. H. Douglas	1921-22.....	*W. M. Robey	1956-57.....	H. K. Thompson
1887-88.....	*T. M. Hunter	1922-23.....	*S. R. Horton	1957-58.....	R. D. Coffey
1888-89.....	*V. E. Turner	1923-24.....	*R. M. Morrow	1958-59.....	S. E. Moser
1889-90.....	*S. P. Hilliard	1924-25.....	*J. A. McClung	1959-60.....	*W. B. Sherrod
1890-91.....	*H. C. Herring	1925-26.....	*H. O. Lineberger	1960-61.....	L. H. Butler
1891-92.....	*C. L. Alexander	1926-27.....	*B. F. Hall	1961-62.....	N. F. Ross
1892-93.....	*F. S. Harris	1927-28.....	*E. B. Howle	1962-63.....	E. D. Baker
1893-94.....	*C. A. Rominger	1928-29.....	*J. R. Self	1963-64.....	S. Byron Towler
1894-95.....	*H. D. Harper	1929-30.....	*J. H. Wheeler	1964-65.....	Darden J. Eure
1895-96.....	*R. H. Jones	1930-31.....	Paul E. Jones	1965-66.....	Pearce Roberts, Jr.
1896-97.....	*J. E. Wyche	1931-32.....	*Dennis Keel	1966-67.....	J. H. Guion
1897-98.....	*H. V. Horton	1932-33.....	*Wilbert Jackson	1967-68.....	George F. Kirkland, Jr.
1898-99.....	*C. W. Banner	1933-34.....	*Ernest A. Branch	1968-69.....	Colin P. Osborne, Jr.
1899-1900.....	*A. C. Liverman	1934-35.....	*L. M. Edwards	1969-70.....	C. W. Poindexter
1900-01.....	*E. J. Tucker	1935-36.....	*Z. L. Edwards	1970-71.....	W. L. Hand, Jr.
1901-02.....	*J. S. Spurgeon	1936-37.....	*D. L. Pridgen	1971-72.....	Wade H. Breeland
1902-03.....	*J. H. Benton	1937-38.....	*J. F. Reece	1972-73.....	Joseph M. Johnson
1903-04.....	*J. M. Fleming	1938-39.....	G. Fred Hale	1973-74.....	James A. Harrell
1904-05.....	*W. B. Ramsey	1939-40.....	F. O. Alford	1974-75.....	Charles W. Horton
1905-06.....	*J. S. Betts				

*Deceased.

PINEHURST MAY 11-14, 1975

DIRECTORY

President—Charles W. Horton

Vice President—Baxter B. Sapp, Jr.

President-Elect—Harold E. Maxwell

Speaker of the House—Ralph D. Coffey, Sr., Morganton *Secretary-Treasurer*—R. B. Barden, Wilmington

Editor-Publisher—R. J. Shankle, Chapel Hill *Executive-Secretary*—Robert L. Cherry, Raleigh

Assistant Editor—James A. Harrell, Jr., Elkin

EXECUTIVE COMMITTEE

Robert B. Litton, *Chairman*
F. G. Hasty

R. B. Barden
C. W. Horton

Harold E. Maxwell
Baxter B. Sapp, Jr.

J. A. Harrell
J. H. Spillman

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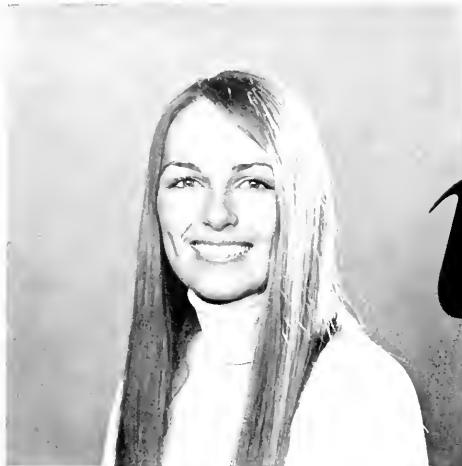
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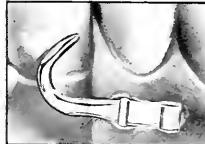
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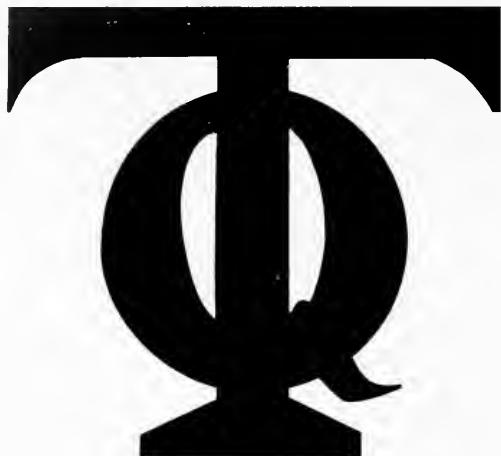
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customer letter May 1971

May 15, 1971

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We are giving you advance notice of a price increase due to higher prices of gold.

Enclosed is our last price list. We will accept orders on this list up to June 30, 1971. Maximum orders accepted on this basis will be for 100 ounces, any assortment.

We suggest that the best possible investment is an increase in your gold inventory.

Our new schedule will still reflect up to a 30% savings on comparative golds.

Sincerely,

Walter L. Jensen
Walter L. Jensen
Exec. Vice President

customer letter May 1972

May 1, 1972

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Dear Doctor:

Just about a year ago I suggested that you stock up on your casting gold inventory, prior to a price increase.

Since then, the cost of gold bullion has gone up to over \$50 an ounce. We have (outside of a small increase) held the line on prices, which in no way reflect the much higher prices of gold! I'm almost certain that gold is going higher. I'm sure our price schedule will have to be revised.

Again, I strongly suggest that you improve your inventory of casting golds now at the present price schedule.

I strongly doubt that gold costs will go down or even remain at the present level. Get as large an order in as you can handle, you've got to be way ahead.

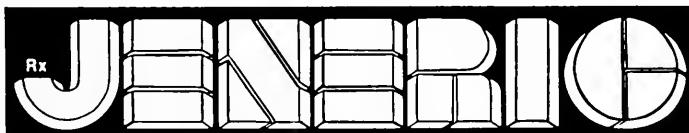
This letter is addressed to Rx-Jeneric customers only and, as an Rx-Jeneric customer, we are most anxious to protect you.

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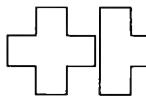
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- 3** Which denture material is less likely to cause tissue inflammation? Vinyl Acrylic
- 4** Which denture material is dimensionally stable, with virtually no shrinkage? Vinyl Acrylic
- 5** Which material is considered the "premium" denture material and is more resilient, virtually resisting breakage? Vinyl Acrylic

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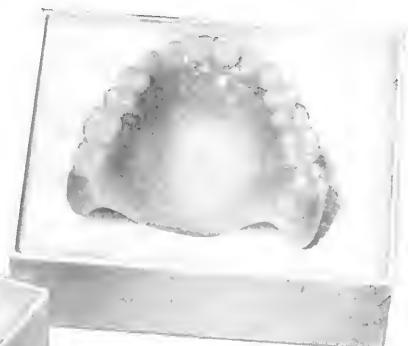
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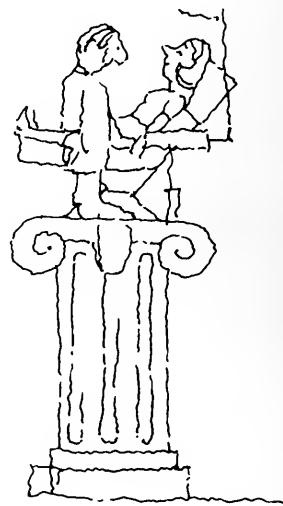
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The case of the motorcycle rider who was quickly cast in a new role.



James McWillis of Winston-Salem. Fourth in a series of actual case histories from the files of Blue Cross and Blue Shield of North Carolina.

The man with the plaster arm is James McWillis of Winston-Salem—an ardent cyclist who had an accident trying to avoid an accident. It happened at Myrtle Beach. While swerving to miss a car, his motorcycle overturned, he broke his arm and sprained both ankles.

James was rushed to a hospital. They x-rayed his arm, put the cast on, and taped his ankles—all in the Outpatient Department. After he got back home, his doctor sent him to the hospital for more X rays to see if his arm was healing properly. And they were also made as a hospital outpatient.

The accident was unfortunate. But James was lucky in one way. He's a member of a Blue Cross and Blue Shield group plan paid for by his employer. It covers outpatient treatments like X rays and casts. So at least he wasn't hobbled with hospital

bills. He's back at work now, at the Reynolds Division of the Forsyth County Hospital Authority, Inc.

Outpatient benefits are just one example of the broad coverage provided by Blue Cross and Blue Shield of North Carolina. In addition to basic inpatient care, these extra benefits include visiting nurse service, skilled nursing facility care, and the services of home health agencies. And all are available on a group or non-group basis. Blue Cross and Blue Shield of North Carolina—a good influence on everybody's health.

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"Double-rounded" bristle tips for improved protection

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Goldman, H. M., and Cohen, D. W.: *Periodontal Therapy*, ed. 4, St. Louis, The C. V. Mosby Company, 1968, pp. 319-320.

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